

December 17, 1956

TOFC Points Toward Profits . . . p. 40

RAILWAY AGE

WORKBOOK OF THE RAILWAYS

THE INDUSTRY'S ONLY WEEKLY NEWSMAGAZINE

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Workbook of the Railways

Vol. 141, No. 26
December 17, 1956

CONTENTS and Week at a Glance

The 'tight money' squeeze . . .

. . . is pinching the railroads where it might hurt most—in their equipment-buying and capital expansion projects. Perhaps even more hurtful, though, is the need for cash—and here the railroads must depend on favorable ICC action on their freight rate hike petitions. . . . p.7

The ICC abused its discretion . . .

. . . when it delayed action on the railroads' freight-rate application to hear "sponging shippers" who want to keep the carriers from earning 3% so they can continue earning 20%, says NYC Chairman Robert R. Young. . . . p.8

FORUM: Pressure for 'piggyback' . . .

. . . grows out of competitive conditions. Such coordinated rail-truck transportation service is the best device yet contrived to enable common carriers to meet the challenge of private transportation. Cooperation with economic forces usually is more profitable than opposition. . . . p.39

The 'piggyback' picture—today . . .

. . . The year-end is close enough for a round-up of what's happened in railroad TOFC activities during 1956. The year in one word—terrific. The highlights are on . . . p.40

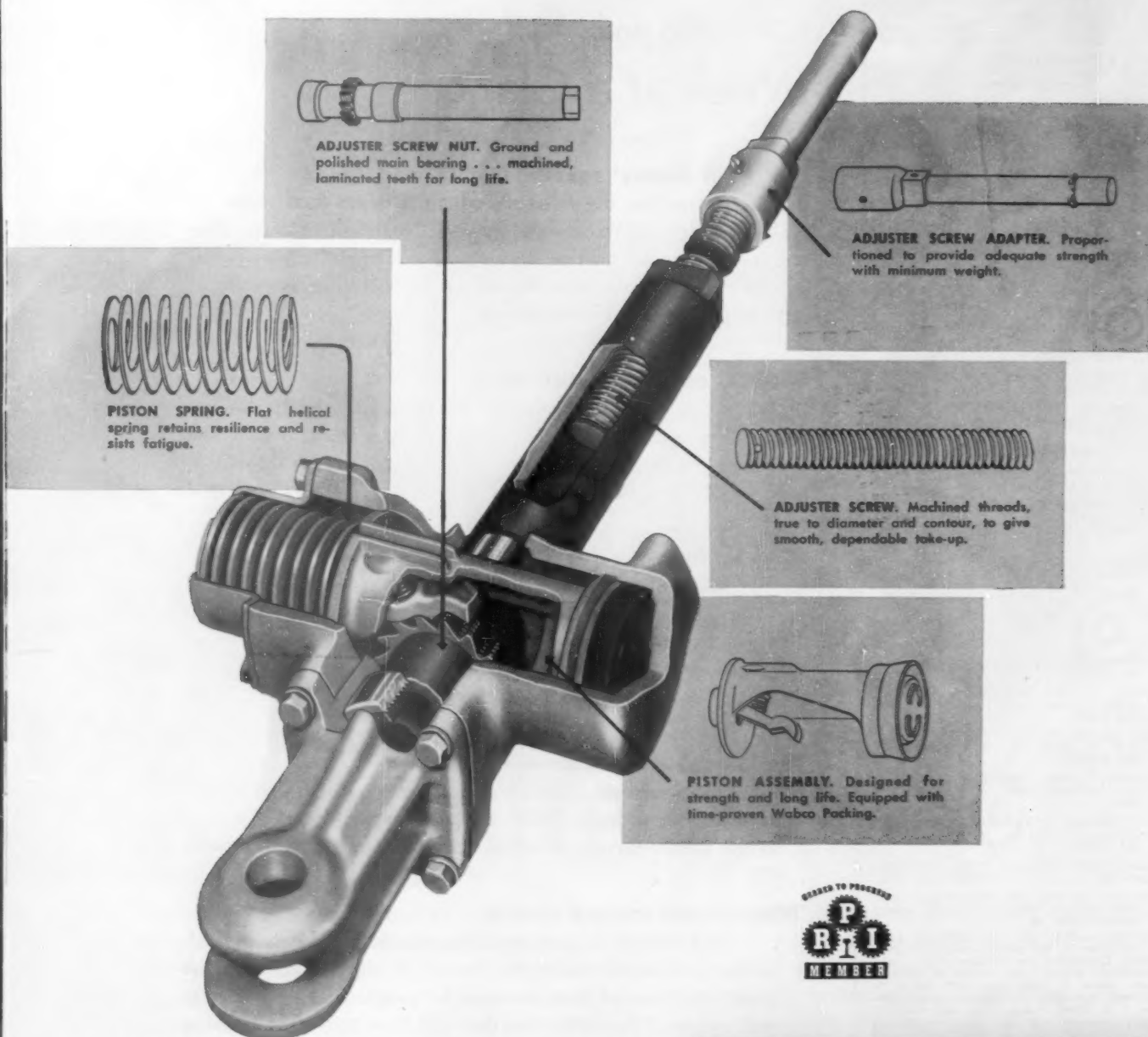
TOFC points toward profits . . .

. . . and volume is growing spectacularly. All kinds of optimistic predictions about the future of piggybacking can be heard, and most of them are made by people who are perfectly well aware of the difficulties that still have to be met to bring these predictions to reality. We take a quick look at some of the gains, and some of the obstacles. . . . p.41

Four phases of TOFC growth stand out . . .

- Mail is moving piggyback now. . . . p.43
- "Cooler" runs are being tried. . . . p.44
- Costs are getting more notice. . . . p.45
- "Fishyback" business is growing fast. . . . p.46

Here are the Reasons the Type "D" DOES THE JOB - STAYS ON THE JOB



Each of the simple, rugged operating parts in the Westinghouse Type "D" Slack Adjuster is designed to stand up under long, punishing service. The Type "D" has the same fine engineering you find in Westinghouse Air Brakes... the same basic design principle that has been proved in many years of passenger service.

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AIR BRAKE DIVISION



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Westinghouse

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for Freight Cars

Current Statistics

Operating revenues, ten months	
1956	\$8,792,282,647
1955	8,374,496,681
Operating expenses, ten months	
1956	\$6,731,852,843
1955	6,290,275,280
Taxes ten months	
1956	\$954,357,508
1955	923,822,927
Net railway operating income, ten months	
1956	\$894,770,856
1955	947,187,510
Net income, estimated, ten months	
1956	\$711,000,000
1955	749,000,000
Average price 20 railroad stocks	
December 11, 1956	96.40
December 13, 1955	98.30
Carloadings revenue freight	
Forty-eight weeks, 1956	35,201,625
Forty-eight weeks, 1955	34,967,490
Average daily freight car surplus	
Wk. ended Dec. 8, 1956	6,197
Wk. ended Dec. 10, 1955	5,728
Average daily freight car shortage	
Wk. ended Dec. 8, 1956	4,115
Wk. ended Dec. 10, 1955	2,768
Freight cars on order	
November 1, 1956	122,250
November 1, 1955	61,964
Freight cars delivered	
Ten months, 1956	53,563
Ten months, 1955	29,673
Average number railroad employees	
Mid-November 1956	1,027,799
Mid-November 1955	1,077,979

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Week at a Glance CONTINUED

Selling 'piggyback' service . . .

. . . to shippers — especially railroad-operated piggyback, where the railroad has direct contact with the shipper—presents a real challenge to railroad sales people, says the Lackawanna's J. C. Barngrove, Jr. . . . p.48

BRIEFS

Countering seasonal trend . . .

. . . piggyback on the PRR hit year's high in volume early this month. Road handled 1,600 common carrier trailers in week ending December 8.

The end of mediation . . .

. . . between the railroads and the BRT was announced by the union in Chicago last week. The brotherhood said it has refused to arbitrate its wage dispute. Presumably the next step would be appointment of a Presidential Emergency Board.

An independent audit . . .

. . . of the Chicago & North Western's books by Arthur Andersen & Co. has resulted in recommended balance-sheet adjustments totaling \$51 million. Net effect of the changes would be to reduce the road's assets by about \$5 million. Security holders must vote to amend the road's articles of incorporation and bond indentures before the adjustment can be made permanent.

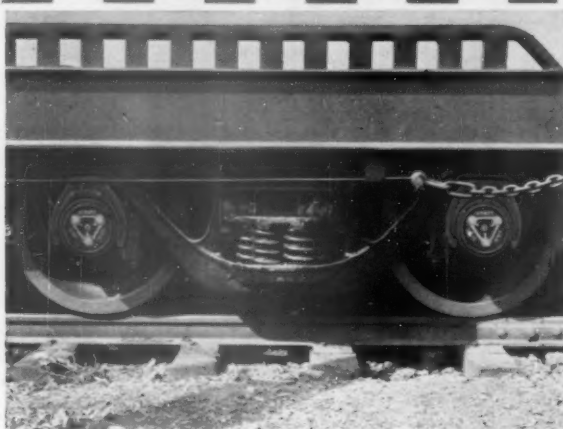
Hopper car shortage . . .


. . . won't be reduced much in 1957, predicts J. J. Kelley of the AAR. He thinks that high export coal volume, the Suez situation and the steel shortage will keep the supply critical. Only 11,000 hoppers had been delivered by November 1 on first-of-the-year orders totaling 43,000.

Highway construction of all kinds . . .

. . . in the 13-year period 1957-69 will require 49 million tons of steel, 1,399 million barrels of cement, 128 million tons of bituminous material and 9,710 million tons of aggregate, according to year-by-year estimates of the Commerce Department's Bureau of Public Roads. At the peak of the program 442,000 men will be employed directly on highway construction jobs.

PIGGY-BACK cars roll on Hyatt Hy-Rolls!



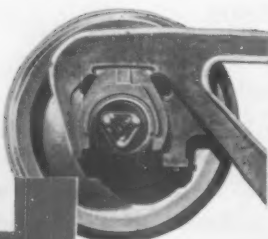
Another  contribution
to railroad
progress

When Piggy-Back, Inc., designed these successful units, every detail was planned to assure maximum efficiency, dependability and economy of operation. One man, for example, can tie down a loaded trailer on these cars in *just one minute*.

That's why these Piggy-Back cars, like so many T-O-F-C cars on American railroads, are equipped with low-cost, low-upkeep HYATT Hy-Roll Bearings. With Hy-Rolls, these cars can speed on passenger schedules with no danger of hotbox delays. And they can run up to three years without bearing inspection or lubrication!

There's an estimated \$2 billion worth of piggy-back traffic available today. To get and *keep* your share most profitably, make sure your T-O-F-C cars have the proven advantage of HYATT Hy-Rolls! Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

Watch "WIDE WIDE WORLD" Sundays on NBC-TV


HYATT HY-ROLL BEARINGS
FOR NON-STOP FREIGHT

Caught in the 'tight money' squeeze...

RRs Face Up to 'High Cost of Living'

American railroads are being whipsawed between the rising interest rates of a "tight money" market and the pressure of shipper demands and their own desires to bolster the national freight-car fleet.

This is particularly evident in the rising cost of equipment trust certificates, the primary means by which railroads normally finance purchases of rolling stock.

It is also the case when railroads undertake to issue bonds for capital purposes.

C. A. Major, president of the Lehigh Valley, commenting on the climbing interest rates, said they have "skyrocketed more than 50% in less than a year. It just doesn't make sense for railroads to borrow money for improvements at 5% and then get a return on their investment of only 4%."

A cross-sectional sampling of the industry by Railway Age, however, would seem to show that railroads are "paying the price" rather than cut back drastically on their car-building programs or defer major improvements planned for their properties. If any new equipment orders have been postponed or modernization projects held up, it is indicated, this results from railroads "waiting on" the Interstate Commerce Commission.

Freight-rate increase petitions now pending before the commission are held vital to any extensive spending program, because revenues that would be derived from the rate boosts are considered a "must" for continued railroad expansion.

Withdrawal of plans to order 1,500 new freight cars by the New York Central was attributed by the road to a lack of cash, this in turn resulting from inadequate earnings.

A dramatic example of the situation was given in a petition filed by the Chicago & North Western

with the Wisconsin Public Service Commission in connection with a recent proposal for revision of passenger-train schedules in that state.

"The seriousness of petitioner's financial condition as a result of inadequate net income and recurrent increases in wage rates and costs of materials without sufficient off-setting increases of freight and passenger traffic volume," the petition declared, "has recently been reflected in the judgment of the business analysts who handle and manage investment funds. To accomplish the purchase of 600 vitally needed 50-ft steel box cars, the North Western on October 4, 1956, had no alternative but to commit itself to pay an interest rate of 5.05% on equipment trust certificates. Even in this period of high interest costs, this represents an unusually heavy financial obligation for equipment of this kind, and is the highest rate ever paid by

the North Western in modern times."

The North Western is not alone. The New Haven also issued certificates at a $5\frac{1}{8}\%$ interest rate in financing 17 diesel-electric units at a total cost of \$3,408,074. Certificates issued by the Central of Georgia in connection with the purchase of locomotives and freight cars (total cost \$1,056,643), went at an interest rate of $4\frac{5}{8}\%$.

Other roads had comparable, though not quite so drastic experiences within the last quarter: the Soo Line issued \$2,640,000 of certificates at $4\frac{1}{2}\%$; the Boston & Maine, \$4,200,000 at $4\frac{1}{2}\%$; the Missouri Pacific, \$2,700,000 at $4\frac{1}{8}\%$; Southern Pacific, \$9,600,000 at 4% (compared with an issue of \$9,660,000 at $3\frac{1}{2}\%$ last spring); Louisville & Nashville, \$7,605,000 at $3\frac{3}{8}\%$; Pittsburgh & Lake Erie, \$7,305,000 at $3\frac{3}{8}\%$; and the Chesapeake & Ohio (considered by se-

RRs SEEN PINCHED BY COMPETITIVE BIDDING RULES

In a pointed opinion on the ICC's recent report authorizing the Southern Pacific to issue \$35,000,000 of $5\frac{1}{4}\%$ first mortgage bonds, Commissioner Richard F. Mitchell declared he thought the road might have gotten a better interest rate if it had not been bound by competitive bidding rules.

"It is with great reluctance that I vote to approve" authorization of the issue, Mr. Mitchell wrote. The issue was to replace a like amount of $2\frac{3}{4}\%$ bonds held in the SP treasury. The commissioner said the road "is increasing the rate of interest on this \$35,000,000 approximately 3%. It is the highest rate of interest approved by this commission for a railroad in the 10 years I have been a member... I vote to approve because this is a well operated and managed railroad. The Southern Pacific has bought large amounts of new equipment and made other capital expenditures to improve the service rendered to the public in the territory it serves.

"The bonds in this case were put up for competitive bidding, if you call it competitive bidding wherein there are but two bidders and the bids are identical. One of the bidders then changed its bid. There was no request for exemption from competitive bidding. Competitive bidding is not a 'care-all' as some brokers seem to think. In a 'tight money' market, such as now exists, there is no such thing as real competitive bidding, and I feel as a result the Southern Pacific Company in making this loan is paying a higher rate of interest than it might otherwise have secured.

"What this commission is interested in is in seeing that the money borrowed by a railroad company is borrowed at as low a rate of interest as is possible considering the market in which the loan is made. If a negotiated loan can be made on better terms, then the commission should grant exemption from competitive bidding so that the loan can be made."

curity analysts now as a top company), \$7,800,000 at 3⅞%.

Mortgage bond issues also show the effect of "tight money" conditions, one of the most striking examples being the experience of the Southern Pacific which issued \$35,000,000 of bonds to replace a like amount issued in 1946 at an interest rate of 2¾%. The interest rate on the present issue: 5¼%. (See *Commissioner Mitchell's comments in the accompanying box.*)

The situation, as seen by security analysts, is that railroads are in the same boat with other borrowers. An overall climb in interest rates, it is reported, started on a very slow incline near the end of last year, continuing throughout the first half of 1956 and then turning up sharply after mid-year. The up-turn is based, Wall Street financial experts say, largely on the policies of the Federal Reserve. It has amounted, they estimate, to an average ascent of about one-half of 1% since mid-year. The type of equipment purchased, the analysts say, has little bearing on the interest rates.

Railroad equipment trusts, they

tend to agree, still are "top paper," but they feel that the upward spiral may not yet have ended.

Explaining continuing issues of the certificates, a spokesman for one railroad noted that "the nature of a great part of the expenditures by railroads is such that their need for equipment and capital improvements cannot be deferred." However, he admitted, because of the present market conditions the road has not been able to budget "all the capital improvements we should be making."

He went on to say that the rising interest rates were not the key "deterrent to financing capital needs. More important so far as railroads are concerned is the inadequacy of cash resources" coupled with large amounts of funded debt, declining demand for equipment trust certificates, and the inability of most roads to resort to equity financing.

C&O Vice-President John E. Kusik reports that the interest rate rise has not affected his road's plans for equipment purchases or other capital expenditures.

For one thing, he says, "when the effect of income taxes is considered,

the increase in interest rates is not too significant." Moreover, he continues, "as long as the expected return from prospective capital outlays is well above the overall cost of capital, a relatively small increase in the cost of borrowing money will not eliminate the profitability of such investments. This is particularly true in the case of a growing company like the C&O, which has many investment opportunities offering returns well above the cost of capital."

Mr. Kusik conceded that prolongation of the upward trend in interest rates would cause curtailment of the expansion of all business, thus trimming the C&O's traffic levels but, he said, there has so far been no indication of such a development.

W. A. Dietze, public relations officer of the Milwaukee, was among those who noted the need for higher earnings which could be attained through the sought-for freight rate increases.

Mr. Dietze said expenditure of the funds it desires for capital improvements would be helpful both to the Milwaukee and the best interest of the country.

Young Assails Rate-Case Delay

NYC chairman says ICC abused discretion in taking time to hear 'sponging shippers'—Also protests lack of action on fare increase and calls railway wage proceedings 'extortion with Congressional license'

Chairman Robert R. Young of the New York Central said last week that the Interstate Commerce Commission abused its discretion when it delayed action on the railroads' freight-rate application to hear "sponging shippers" who want to keep the carriers from earning 3% so they can continue earning 20%.

He also complained about the commission's delay in acting on the fare increases proposed by eastern railroads, saying none of the applicant roads would be justified in buying new passenger equipment unless the fare increase is granted in full.

Of the railroad labor situation, Mr. Young said the carriers could not stand a 30-day strike, and thus a wage proceeding "isn't negotiation—it's extortion with a Congressional license."

Preview—The NYC chairman

made these statements in Washington December 10, at a press conference which preceded his appearance at a hearing conducted by the Subcommittee on Economic Stabilization of the Joint Senate and House Committee on the Economic Report. The press-conference statements comprised a preview of many points made subsequently in Mr. Young's presentation to the Congressional committee.

The latter dealt generally with "inflation," and it was an amplification of a speech Mr. Young made November 19 before the Economic Club of New York. It was after he had made that speech that the Congressional committee invited him to appear at the hearing, he said.

Freight Rates—Mr. Young's press-conference statements about the Ex Parte 206 freight-rate case

also included his assertion that if the ICC were concerned with the public interest it would "long since" have authorized the interim increase of 7% sought by railroads to offset advances in wages and other increases in costs. Railroads, he added, can't afford to pay 5½% for money to invest in cars where it will earn only 3%.

In his statement to the congressional committee, the NYC chairman said the big steel companies, "whose biggest easy going customer is the United States Government," raise their prices "and their profits the very same day they begin paying a wage increase." He contrasted that with the situation of the railroads, saying:

"We must endure the mockery of lengthy and costly hearings before the ICC months, even years, after our wage increases have started running, in order that special and selfish interests who seek to sponge on the railroads by ICC license may have their wishes heard. Those protests (Continued on page 10)

MARKET OUTLOOK THIS WEEK

Loadings Up 2.3% Over Last Year

Loadings of revenue freight in the week ended December 8 totaled 737,757 cars, the Association of American Railroads announced on December 13. This was a decrease of 14,393 cars, or 1.9%, compared with the previous week; an increase of 16,239 cars, or 2.3%, compared with the corresponding week last year; and an increase of 84,226 cars, or 12.9%, compared with the equivalent 1954 week.

Loadings of revenue freight for the week ended December 1 totaled 752,150 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, December 1			
District	1956	1955	1954
Eastern	120,627	122,280	110,004
Alleghany	150,206	142,478	119,319
Pocahontas	65,260	60,672	50,173
Southern	131,740	132,903	123,299
Northwestern ..	100,755	83,887	79,637
Central Western	129,050	125,353	120,524
Southwestern ..	54,512	56,213	58,821
Total Western Districts	284,317	265,453	258,982
Total All Roads	752,150	723,786	661,777
Commodities:			
Grain and grain products	51,010	47,167	43,666
Livestock	8,815	11,835	10,122
Coal	152,164	144,561	121,584
Coke	12,931	13,039	8,765
Forest Products ..	44,511	43,567	44,971
Ore	50,147	26,341	17,982
Merchandise i.c.l.	57,235	61,156	61,033
Miscellaneous ..	375,337	376,120	348,654
December 1 ..	752,150	723,786	661,777
November 24 ..	650,920	671,930	583,520
November 17 ..	763,876	766,216	697,346
November 10 ..	772,761	792,042	708,749
November 3 ..	800,272	804,261	696,026
Cumulative total, 48 weeks	35,201,625	34,967,490	31,528,962

New Equipment

FREIGHT-TRAIN CARS

► **Conemaugh & Black Lick.**—Ordered 25 70-ton gondola cars, Bethlehem Steel; approximate cost \$250,000; delivery scheduled for second quarter 1957.

► **Illinois Central.**—Plans to construct 2,000 box cars at Centralia, Ill., shops, cost \$13 million, in addition to finishing 1956 backlog of 500 box cars delayed because of steel strike; also budgeted—110 flat cars, 50 steel caboose cars, and conversion of 150 freight cars for specialty loading.

► **Lackawanna.**—Will convert 50 cars for use in piggyback service; work is to be done in DL&W shops at Scranton, Pa.

► **Northern Pacific.**—Ordered 50 19,000-gal tank cars, ACF Industries; delivery expected next June.

► **Northern Pacific.**—Has scheduled 1957 purchase of 150 cars for hauling logs.

► **Tennessee Central.**—Ordered 10 70-ton covered hopper cars, Greenville Steel Car; delivery expected May 1957.

► **Toronto, Hamilton & Buffalo.**—Ordered 50 70-ton gondola cars and 10 70-ton covered hopper cars, National Steel Car Corporation; delivery of both lots expected in October 1957.

► **Virginian.**—Ordered materials for construction in its Princeton, W. Va., shops of 500 70-ton hopper cars during last half of 1957.

LOCOMOTIVES

► **Illinois Central.**—Will purchase four diesel-electric passenger locomotives, cost \$920,000; delivery expected first quarter 1957.

► **Northern Pacific.**—Changed previous order, placed with Electro-Motive, for five 4-unit diesel-electric freight locomotives (Railway Age, May 7, p. 9) to 20 1,750-hp road-switching units; delivery expected in 1957.

► **Virginian.**—Ordered six additional 2,400-hp "Train Master" diesel-electric road-switching units, Fairbanks, Morse; delivery scheduled for second quarter 1957.

PASSENGER-TRAIN CARS

► **Chicago Transit Authority.**—Is considering order for 70 more converted PCC-type streetcars for rapid transit use; delivery would be in 1958.

SPECIAL

► **Norfolk & Western.**—Ordered 10 air dump cars, Baldwin-Lima-Hamilton, for delivery in November 1957.

► **Pennsylvania.**—Is acquiring rights-of-way for possible future (Continued on page 10)

MARKET OUTLOOK (continued)

construction of two new branch lines to reach industrial development sites on Indiana bank of Ohio river northeast of Jeffersonville, Ind.; "when branches actually will be built," says C. G. Magruder, PRR regional manager, Southwestern region, "cannot be determined at this time; much will depend on our success in interesting industries to locate in the area."

New Facilities

► **Baltimore & Ohio.**—Announced, on behalf of its subsidiary Staten Island Rapid Transit, award of contract to American Bridge Division, U.S. Steel Corporation, for construction of single-track railway bridge which will incorporate world's longest vertical lift span; bridge, to be 1,647 ft long, including 558-ft-long vertical lift span, will cross Arthur Kill between Elizabeth, N.J., and Irvington, Staten Island, N.Y., and is being constructed under order of Secretary of the Army; amount of contract covering its construction—\$5,800,000—makes it largest single construction contract ever awarded by the B&O; substructure is being built by Charles F. Vachris, Inc., Brooklyn, N.Y., and has been under way since last May; amount of substructure contract is about \$1,800,000.

► **Canadian National.**—Will acquire new 30-mile \$5 million spur line to serve 400-sq-mi mining project under development by International Nickel Company of Canada in Mystery-Moak Lakes area of Manitoba; INCO, Ltd., will begin line construction now, transfer ownership to CNR later.

► **Chicago Transit Authority.**—Earmarked \$800,000 for construction of two through tracks in Wilson Avenue area to supplement two existing tracks and for design work only on modern signal system for unsignaled sections of its system.

► **Illinois Central.**—Plans to lay 150 miles of new track in 1957 at cost of \$6,751,000; additional yard and side track will cost about \$2,320,000; bridge work, \$1,300,000; new and improved buildings, stations and shops will cost almost \$1½ million in 1957; major projects will be diesel repair facilities in Hawthorne Yard (Chicago), Waterloo, Ia., Louisville, Ky., and Fulton, Jackson, Tenn., and in Johnston Yard at Memphis.

► **Louisville & Nashville.**—Two sets of composite 60/100 cycle continuous cab signal and automatic train control equipment have been ordered from Union Switch & Signal-Division of Westinghouse Air Brake Company for installation on L&N diesel-electric locomotives.

► **Missouri Pacific.**—Ordered 56 miles of 132-lb and 74 miles of 115-lb rail to be laid in 1957.

► **Norfolk & Western.**—Will increase monthly dumping capacity of its Coal Pier 4 at Lamberts Point, Norfolk, Va., by 100,000 tons through installation of new sidewall loader costing about \$500,000; delivery and installation of loader is expected to take about 20 months.

► **Northern Pacific.**—Expenditures for new service buildings in 1957 will total about \$655,000 including several new depots, new yard office at Everett, Wash., and remodeling of Pasco, Wash., depot, and freight house at Butte, Mont.

(Continued from page 8)

have not the slightest relationship to the public interest, but since they lead clear to the Cabinet and Defense Department they are too powerful for the ICC to ignore."

Achilles Heel.—Later on in his statement, Mr. Young asked how the Department of Defense can "close its eyes to our Achilles heel, our railroads?" Saying also that "indeed, Mr. Malenkov is smiling," he added:

"They know that current rates are not keeping our physical plant alive, particularly in the passenger field. Yet their own underlings come in and oppose our passenger-fare increases in the face of a wage rate that has tripled. They act as though the Defense Department had no higher obligation to the public interest than a coal operator, some of whom do not have enough judgment to see that if they do not pay fair rates the railroads cannot continue to provide cars with which to ship their coal. A railroad without cars is as useless as a skyscraper without elevators."

Future "Zero."—As to the future of passenger business generally, Mr. Young said at his press conference that it was "zero" so long as the government continues to impose heavy taxes on railroads while subsidizing their competitors. He also said that improvements in train service are tied to the fare-increase proposals.

In response to questions, he said that the running time of passenger trains could be cut 10% immediately and 30% ultimately. He added that there is no engineering reason why passenger trains can't be operated at speeds of 150 mph. And he asserted that railroads could "ground the airlines" on such runs as that between New York and Washington if airline subsidies were withdrawn.

"Grossly inaccurate" was what he said of statements to the effect that the reported deficit from passenger-train operations is mere book-keeping. He explained that the deficit is real on the NYC and Pennsylvania, which have heavy volumes of passenger business.

Asked why the NYC had not gone in for "piggybacking," Mr. Young replied that its president, A. E. Perlman, was convinced that this trailer-on-flat-car service for independent truckers "aids our competitor in his

most difficult field—getting over the road.” (Railway Age, Dec. 10, p. 7). He also said that the service could build the trucker into a railroad customer important enough to force his rates below compensatory levels.

Inflation's Cause—Mr. Young's presentation to the Congressional committee indicated that his general position on inflation was that wage increases have been its “prime cause.” His figures indicated that wages have risen 320% since 1932 while consumer prices have gone up only 100%.

“Our railroads,” he said, “no sooner stagger up from one of these perennial increases than they are met by the bludgeon of the next: ‘pay offs’ to our congressionally licensed monopolists, a process of exploitation of the less favored unctuously called ‘negotiation.’ And what could be more inflationary, more degrading, more destructive of the joy of accomplishment, than a work rule which requires two men where one is needed?”

Featherbedding—At his press conference, Mr. Young had estimated that about 20% of railroad wage costs are due to “featherbedding.” In his statement to the Congressional committee he said that two of a freight train's crew of five men are “feather bedded.”

The NYC chairman recognized, as he put it, that he made statements like the above “at the risk of being painted as an enemy of labor, which I am not.” He predicted that the “end result” of policies which he condemned would be “war, galloping inflation, and eventually forced labor,” and asked: “Who will then be remembered as the friends of labor, those who furthered these policies or those who warned against them?”

Service Orders Canceled

The Interstate Commerce Commission canceled five service orders as of December 8. The canceled orders were all those issued this year to alleviate car shortages.

They included No. 910, the ban on slow railroading, which prohibited carriers from willfully delaying movements of loaded freight cars, and No. 911, the operating rules order, which required a movement to be made on each loaded and empty freight car within 24 hours after such movement became possible and proper.

The other three restricted free-time allowances for loading or unloading cars at ports—Nos. 912 and 913 applying at ocean ports, and No. 914 at Great Lakes ports.

The commission's announcement said the cancellations were based “on a finding that car shortages have become less acute and on a belief

that continued railroad-shipper cooperation in efficient utilization of the existing car supply can obviate the need for such orders for the time being.”

The announcement also said that the orders “may be reinstated if an emergency situation in car supply again develops.”

RRB Plan to Cut Unemployment Costs

A new partnership program designed to stabilize railroad employment and conserve unemployment insurance funds has been announced by the Railroad Retirement Board.

Under the new project, results of inventories of claimants for unemployment benefits will be relayed to RRB's Chicago headquarters. There they will be summarized by railroad, location, and occupational grouping. The summaries will be sent to major railroads and to all RRB field offices.

Finally, field office managers will contact local railroad offices to deter-

mine the best method in each locality by which the greatest number of claimants can be given employment—not only in railroad service but in other fields as well.

H. L. Carter, director of the board's bureau of unemployment, said: “The teamwork of management, labor, and the board was to a substantial extent responsible for a reduction of over \$100,000,000 in unemployment insurance benefits and administrative costs last year. We sincerely believe that this new partnership will be very fruitful.”

UP Opens New 3-Level Service Shop

A new three-level servicing shop equipped to give complete enclosed servicing and running repairs to diesel locomotives has been placed in operation at the Union Pacific's Council Bluffs, Iowa, yard.

The \$2 million facility can handle 24 locomotives at one time. The three-level construction gives workmen access to all parts of the units at the same time.

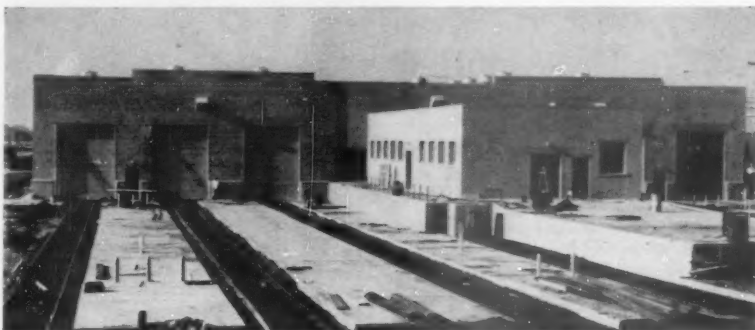
A feature of the new shop is its sanding facilities, which make the shop a “complete” servicing area. Formerly all sanding operations were done outside the work shops.

The shop is divided into two distinct sections—each with three tracks that will allow “three-level” servicing for 12 units. Sections are separated by a concrete platform which houses a small machine shop, a tool room and office space.

More than sixteen miles of pipe carry necessary materials—including sand, water and fuel—directly to the individual diesels being serviced.

Attached to the shop is a store department for supplies, office space, and locker buildings for crews and shopmen.

The building, of concrete block



REMOTE-CONTROL overhead doors, as well as three of six approach tracks,

are shown in this view of the Union Pacific's new diesel servicing shop.

construction with glass block windows, has 66 exhaust hoods each with individual fans.

Remote controls open and close large overhead doors from either end of the structure.

Canadian 'Non-Ops' Get Health Plan

A nationwide health and welfare plan affecting some 140,000 non-operating railroad employees and their families—estimated at 500,000 persons in all—has been approved in principle by Canadian railroads.

The plan, to become effective January 1, will cost about \$13,500,000 annually, to be shared equally by railroads and employees.

It will apply to non-operating employees who had completed 60 calen-

dar days of service by last May 16. Other employees will be covered from the first of the month after completion of 60 calendar days of service. The plan provides for group life insurance of \$500 and weekly compensation for loss of income through sickness or non-occupational accident to a weekly maximum of \$40 for employees only. These benefits are to be underwritten by six Canadian life insurance companies, which

were successful in competitive bidding.

Hospital and surgical benefits are made available to employees and their dependents and are underwritten by Blue Cross and Trans-Canada Medical plans as a result of competitive bidding. In Saskatchewan, Alberta and British Columbia, where statutory provincial hospital plans are in effect, railroad employees and their dependents will be provided with comprehensive medical and surgical benefits.

Canadian Pacific employees in British Columbia will continue to have surgical and comprehensive medical benefits provided by the Canadian Pacific Employees Medical Association of British Columbia, and premiums covering these benefits will be paid to the association.



Christmas Mail Goes Piggyback on the SP

Christmas mail started moving by piggyback from San Francisco recently and will continue through the holiday rush. A special shipment, consisting of five Southern Pacific piggyback vans—carrying 1,800 sacks of mail—inaugurated the service with a delivery from San Francisco to Los Angeles

county. Regular deliveries are being routed from San Francisco to Tully Air Base near Los Angeles for distribution to 118 cities. The railroad will move approximately 6,000 sacks of mail daily by T-O-F-C. The service has bypassed extra handling normally required at the Los Angeles Post Office.

Eased Truck Leasing Rules Effective Feb. 1

The Interstate Commerce Commission has issued a watered-down version of its truck-leasing rules to become effective February 1, 1957.

The trip-leasing ban, which is the rule fixing a minimum lease period of 30 days, remains, but its scope has been restricted by exemption of so-called farm trucks and by other exceptions. The latter were made by the commission, but the farm-truck exemptions are required by legislation enacted by Congress last year.

The Essence—Despite the liberalizations, the commission called the 30-day rule "the very essence of the reforms which are needed." Another liberalization resulted from elimination of the proposed rule which would have prohibited rental payments of the revenue-splitting type.

The rules are designed to govern the lease and interchange of vehicles by carriers subject to commission jurisdiction. They were prescribed originally in 1951, but many of them, including the trip-lease and revenue-splitting bans, have been stayed by successive postponements.

The modified rules now prescribed were embodied in an order which accompanied a supplemental commission report, dated November 23, in Ex Parte No. MC-43. The report and order disposed of all matters currently pending in the case, the commission said.

It also said that rules of the scope now determined upon "should be tested by experience in an atmosphere which has been freed of most of the other long-pending and controversial refinements." Moreover, the present action "does not mean that the eliminated rules or their objectives are unsound, nor that the entire subject may not require consideration at some future date."

BLE Head Would Ban All Explosive-Carrying Trucks

"It's high time Congress made a complete and thorough investigation with an eye to passing laws banning trucks carrying explosives and inflammables from the highways."

So said Guy L. Brown, Grand Chief Engineer of the Brotherhood of Locomotive Engineers, after a recent accident in which a truck carrying fuel oil ran into the second of two diesel-electric locomotives hauling a Chesapeake & Ohio freight

train near Michigan City, Ind. An engineman and a fireman, as well as the truck driver, died in the accident, and two railroad workers were killed when an acetylene torch blew up while they were trying to clear the tracks.

The accident occurred, Mr. Brown said he was informed, in broad day-

light with visibility good and warning-flashers operating. The union leader said he is sending a letter to all divisions of his organization in this country and Canada urging members to demand that their state and national legislators "take whatever steps are necessary to end this kind of massacre."

N&W to Remove Cab Signaling

The Norfolk & Western has been granted Interstate Commerce Commission permission to discontinue automatic cab signaling on 225.3 miles of single track and 12.8 miles of double track between Roanoke, Va., and Hagerstown, Md.

This territory was equipped with automatic block signaling in 1924 and 1925. The continuous inductive train control and cab signaling system was added in 1925 and 1926. In 1933 the train control was removed leaving the cab signaling.

Between 1944 and 1953, centralized traffic control was installed.

Excerpts from the commission order authorizing the N&W to discontinue the cab signaling read as follows:

"The petitioner estimated that the cost for inspection and maintenance of cab signal equipment on its 34 locomotives used on its district during 1955 was \$85,375 and about \$20,000 for wayside equipment, or a total of \$105,000. During that period (Continued on page 64)

Railroading

After Hours

Speech Making

During the period of Ralph Budd's presidency of the Burlington, I acquired the habit, whenever he made a public address, of hearing him if possible. If not, I always tried to get hold of a copy of his speech, to read.

I observed that Mr. Budd did not spread his wisdom thin by making a lot of addresses. When he did talk, however, he always said something to inform and interest his hearers. His judgements and opinions never failed to show original thinking and insight. His addresses were, obviously, his own work. More often than not, they were made without a manuscript in front of him.

A couple of weeks ago I once again had the pleasure of hearing Mr. Budd speak. He came out of retirement at Santa Barbara to accept an award from the American Institute of Consulting Engineers. His brief remarks in response to a eulogy were in his old-time style of disciplined simplicity, brevity and penetration.

I jot down these notes about this great man—not to flatter him, because he has no need of praise. Rather, I'd just like to raise the question whether his approach to speech-

by
James G.
Lyne



Editor,
Railway
Age

making isn't something younger railroad men might look into.

There are probably still few roads to learning that excel that of studying the ways of large-caliber men.

Passenger Debate

I've just found out that the first of two extensive studies of railroad passenger service (one on cost control, the other on marketing) is going to be published about the middle of January by the Harvard Business School.

I've learned from the author (Professor Dwight Ladd of the University of Western Ontario) enough about the content of his cost-control study to make a couple of pretty safe predictions. One is that the report is going to reveal a lot of new and important information, never before in

print, about how to make passenger service a better earner than it has been. Another is that there are some observations and revelations in the book that are going to fall far short of making everybody happy.

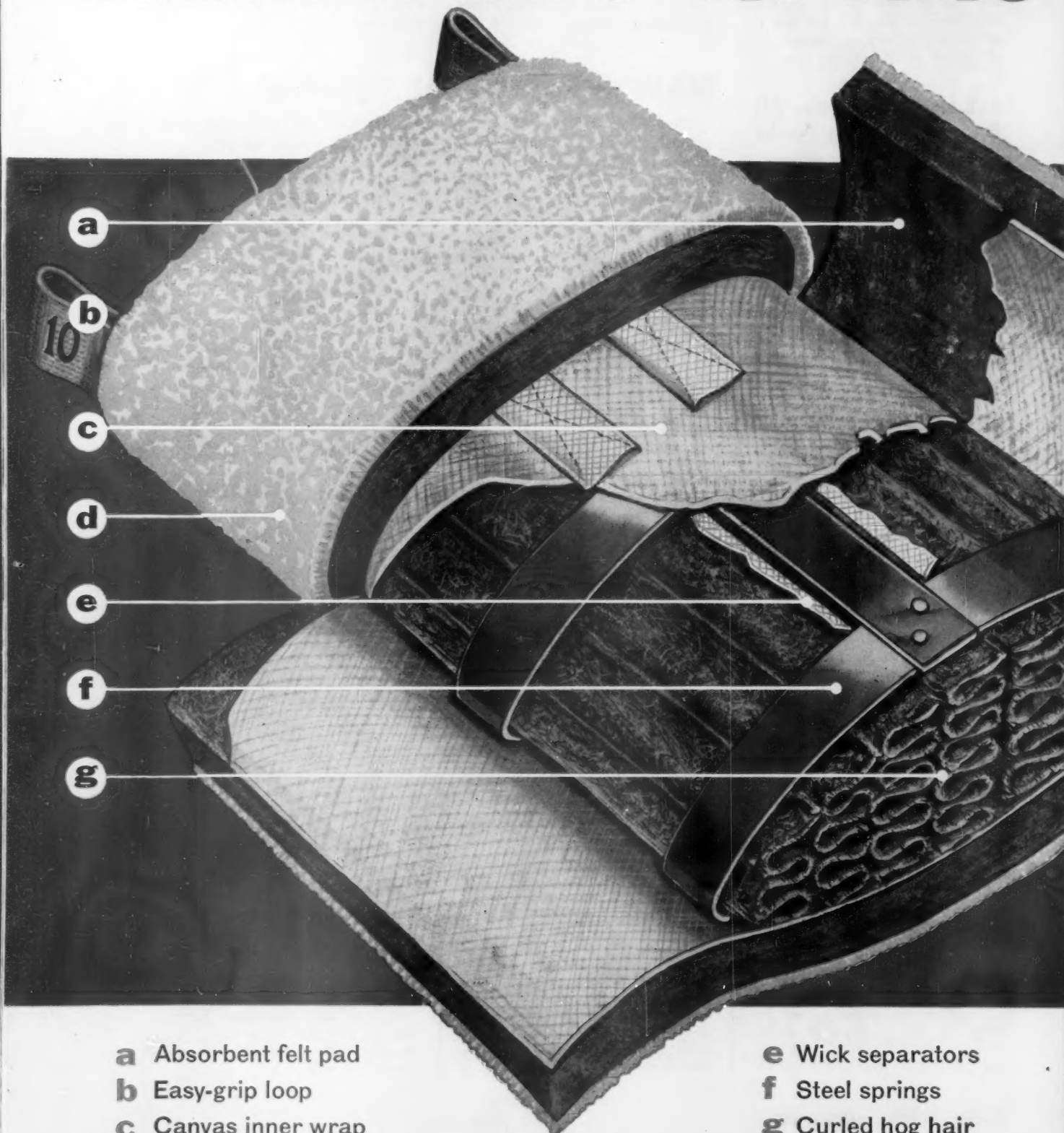
Big Lettering

The interest in "who done it first" in the area of big lettering continues unabated. Two people—neither of them employed by the Frisco—have written in to advance the claims of that company. One is Ernest Williams, associate professor of transportation at the Columbia University School of Business. The other is Allen Hazen, assistant engineer of the Milwaukee at Minneapolis.

Mr. Hazen refers me to our company's Car Builders Cyclopedia for 1919—where, sure enough, there's a Frisco car pictured with mighty big lettering on it. The book also shows a Virginian car with big lettering.

The M&StL's public relations director, Louis Gelfand, asserts that—whoever may have started this style—no road today uses bigger letters than his road's 6 ft 11 in. ones. "Our traveling billboards are winning approval," he adds.

See for yourself
EVERYTHING* IN THIS



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**Everything except the spring steel,
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Yes . . . in this new Spring-Pak Lubrication Pad, the resilient, curled hog hair acts as a reservoir. . . . The long-lasting cotton pad—the high-quality felt—the wick separators . . . *all have remarkable capillary action . . . all feed oil continuously!*

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Questions and

Of current interest

Answers

to the Transportation Department

Is a consignee entitled to the demurrage strike rate on a car which is released several days before his plant goes on strike, if the car has not been switched out to the interchange track by the consignee, who does his own switching . . .

?

Can a telephone call be used to give a consignee notice of placement of a car on a public delivery track . . .

?

When should a car ordered for loading be considered released by the shipper . . .

?

CONDUCTED by G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York 7.

Yes. During actual strike time.

An industry performing its own switching unloads a car on June 28. The industry notifies the railroad's agent of this release the same day. The industry's employees go on strike July 1 at 12:01 a.m. The strike is in effect until July 15 at 11:59 p.m. The released car is delivered empty to the railroad on the regular interchange track July 16 at 5 p.m. The industry presents the railroad with a claim for "strike relief" under the provisions of Demurrage Rule 8, Section G. Does the strike demurrage

apply to the detention while the car is held empty during the period of the strike? Or does Rule 6-D-1 apply from June 28 to July 16?

Detention from time of placement on the industry's interchange track until loading and return to the interchange track should be considered an unloading transaction under Rule 2-A. If the terms of Rule 8-G are met, the strike rate of \$2.65 per day is applicable from 7 a.m. July 1 to 7 a.m. July 16 only.—*Eastern Association of Car Service Officers.*

Yes. It's OK to telephone.

Rule 4-A of the demurrage tariff provides that if a car for unloading is not placed on the public delivery track within 24 hours from the first 7 a.m. after notice of arrival is given

the consignee, notice of placement shall be given the consignee. The carrier can give this notice to the receiver by telephone.—*Eastern Association of Car Service Officers.*

When carrier gets shipping instructions.

For invoice purposes, a shipper requests the railroad to furnish him the net weight of lading of a car loaded for road movement. The shipper does not furnish the carrier his shipping instructions until he receives this information. In the event that the railroad does not furnish the shipper the weight information until one or more days have gone by, when, from a demurrage standpoint, should the railroad consider that the shipper has released the car?

The car cannot be released until shipping instructions have been given to the railroad. Demurrage Rule 2-A states clearly that "loading" includes the furnishing of forwarding directions. Carloads are weighed by the railroad for the purpose of establishing freight charges. It is not necessary for shippers to have this weight before supplying shipping instructions to the railroad.—*Eastern Association of Car Service Officers.*

It has been a long time since we've had a car service quiz. I think we'll have to work out one and run it soon after the first of the year. Since this is our last column before the holidays, I'd just like to say thanks, Merry Christmas and Happy New Year to our contributors, and above all to the readers of this column . . .

G.C.R.



Merry Christmas



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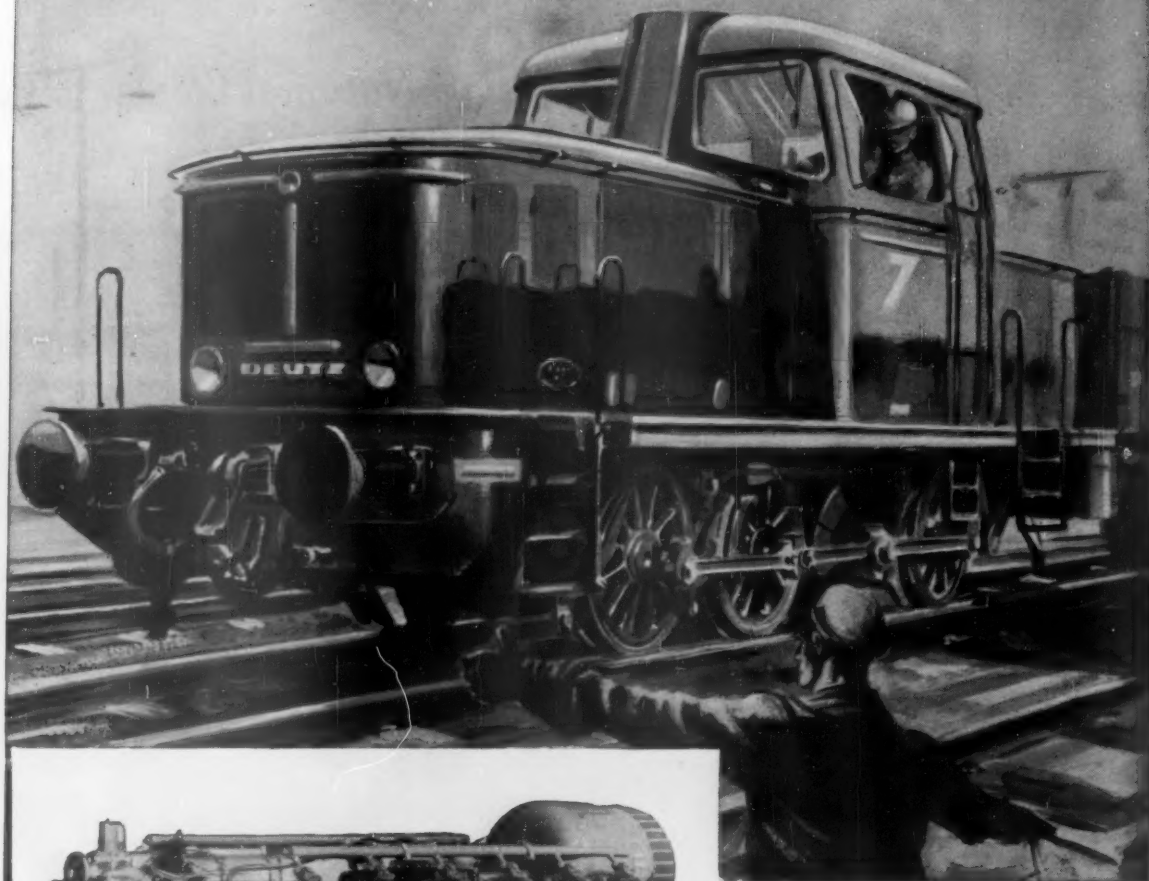
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Piggy-Back Inc.'s revolutionary "floorless" flat cars with "guided loading" will slash time and expenses for a quintet of the nation's top railroads:

- Low-cost 79'6" Piggy-Back, Inc. standard car costs and weighs about the same as regular 40 ft. flat car
- Better clearances with Piggy-Back's low, modern cars
- "Guided Loading," special tie-down devices cut terminal handling speeds 4 to 6 times
- "Guided Loading," and fast tie-down eliminate yard switching
- Shock absorbing tie-down protects trailer and lading against shock

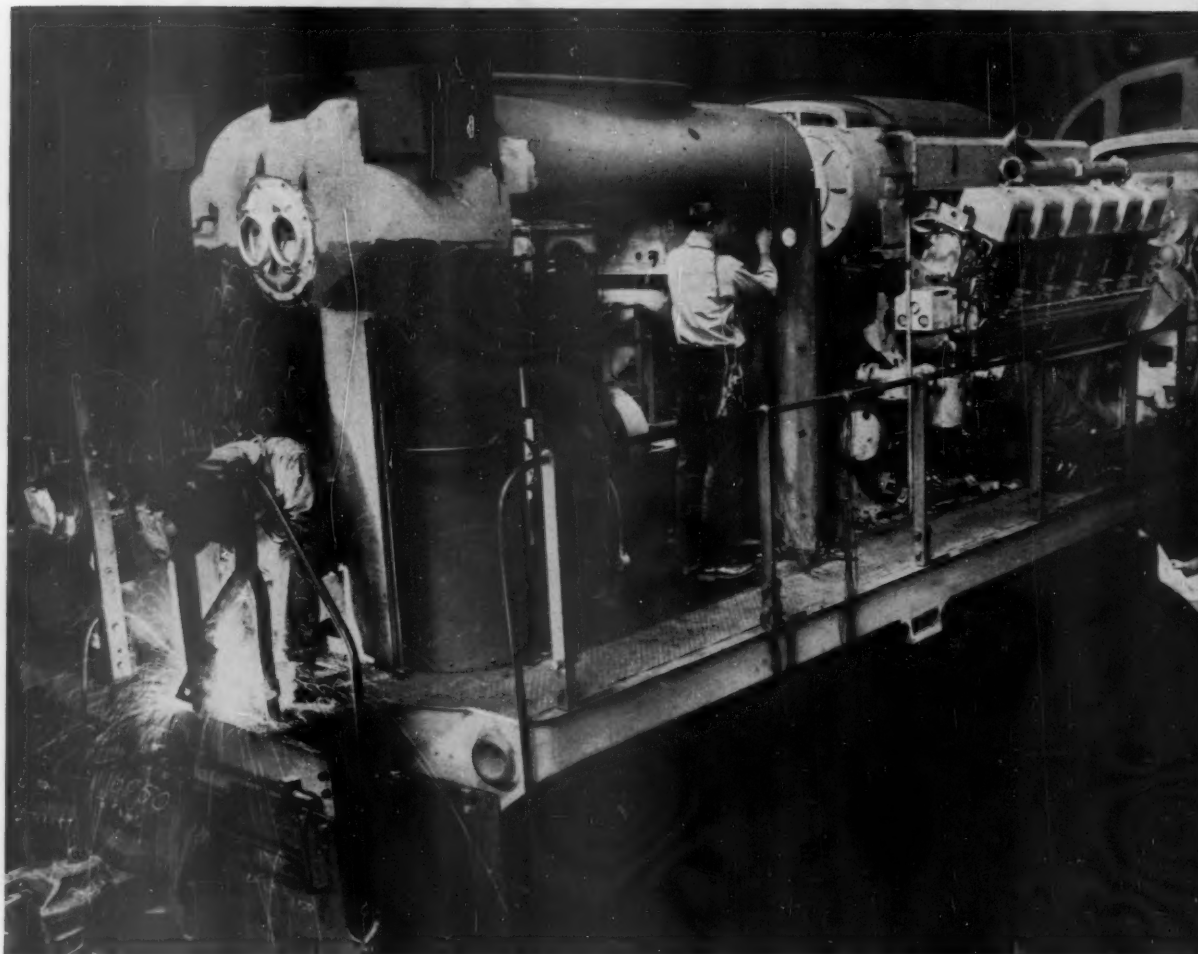
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ALCO modernizations offer



Long-service locomotives are rebuilt in ALCO plant. Railroads may choose complete ALCO Remanufacturing Services. Work includes all engine rebuild and modernization, as well as chassis and electrical improvements. ALCO returns your locomotives upgraded to this year's specifications for service and performance.

ALCO's Modernization Kits and Remanufacturing Services include these important items:

ALCO water-cooled turbocharger—more efficient, responds rapidly to speed and load changes, easy to maintain.

Ni-Resist exhaust manifold—reduces casting growth and failures.

High-pressure fuel injection with snubber valve—more complete fuel combustion, lube-oil condition improved, line erosion reduced.

Ni-Resist insert pistons—top-ring groove wear reduced, increases ring mileage.

Grooveless and partially grooved engine bearings—oil-film thickness and load-carrying capacity increased.

New hardened crankshafts.

Oil-bath filter—maintains high efficiency over 95 per cent, less filter maintenance, reduces engine wear.

Simplified amplitudyne control system—fewer parts in system with simpler circuits, maintenance reduced.

Two-piece idler gear with inboard and outboard bearings.

***Crankshaft** resurfaced by chrome-plating.

***Serrated fit** between cap and block prevents distortion and misalignment, eliminates fretting.

***Items** which are normally accomplished by ALCO's Remanufacturing Services.

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Two Methods Available for Application of Locomotive Improvements: Modernization Kits Are Installed in Railroad Shops; Remanufacturing Services Accomplished at ALCO Plant

Lower maintenance costs with improved performance on long-service ALCO locomotives can be yours when you take advantage of ALCO modernizations. New design developments in ALCO diesel engines, chassis and electrical equipment can be applied to your motive power to give you features which will upgrade your performance standards to this year's level.

Two modernization services are available at ALCO: Modernization Kits and Remanufacturing Services. You may select the method which suits your operation best, or utilize both services. In either service you get completely designed, tested and warranted equipment from the original manufacturer — ALCO.

Modernization kits include complete parts with detailed installation instructions. The kits permit complete installation of an improved, better performing system or assembly within your own shops, often during normal overhaul periods with no extra loss of operating time. At present, many railroads are applying the modernizations as a package—locomotive by locomotive. The modernizations provided by

ALCO allow your long-service locomotives to match the performance of those now coming from the production lines.

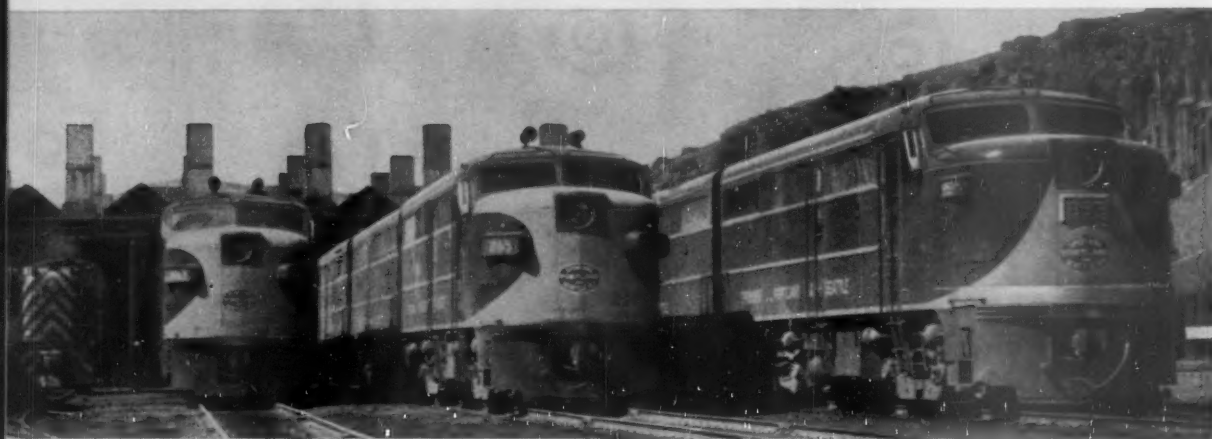
Remanufacturing Services offer complete engine and locomotive remanufacturing along with many other improvements at fully equipped ALCO plants. With extensive facilities, established manufacturing techniques and many years of locomotive experience, ALCO repair personnel provide the best in locomotive upgrading at moderate cost. For engines, this service is available on either a unit exchange or repair and return basis. In addition, all ALCO remanufacturing is warranted along with the equipment installed.

Let Modernization Kits and Remanufacturing Services benefit your ALCO locomotives, bring more power per dollar. Contact your nearest ALCO Sales Office for complete information, or write P. O. Box 1065, Schenectady 1, New York.

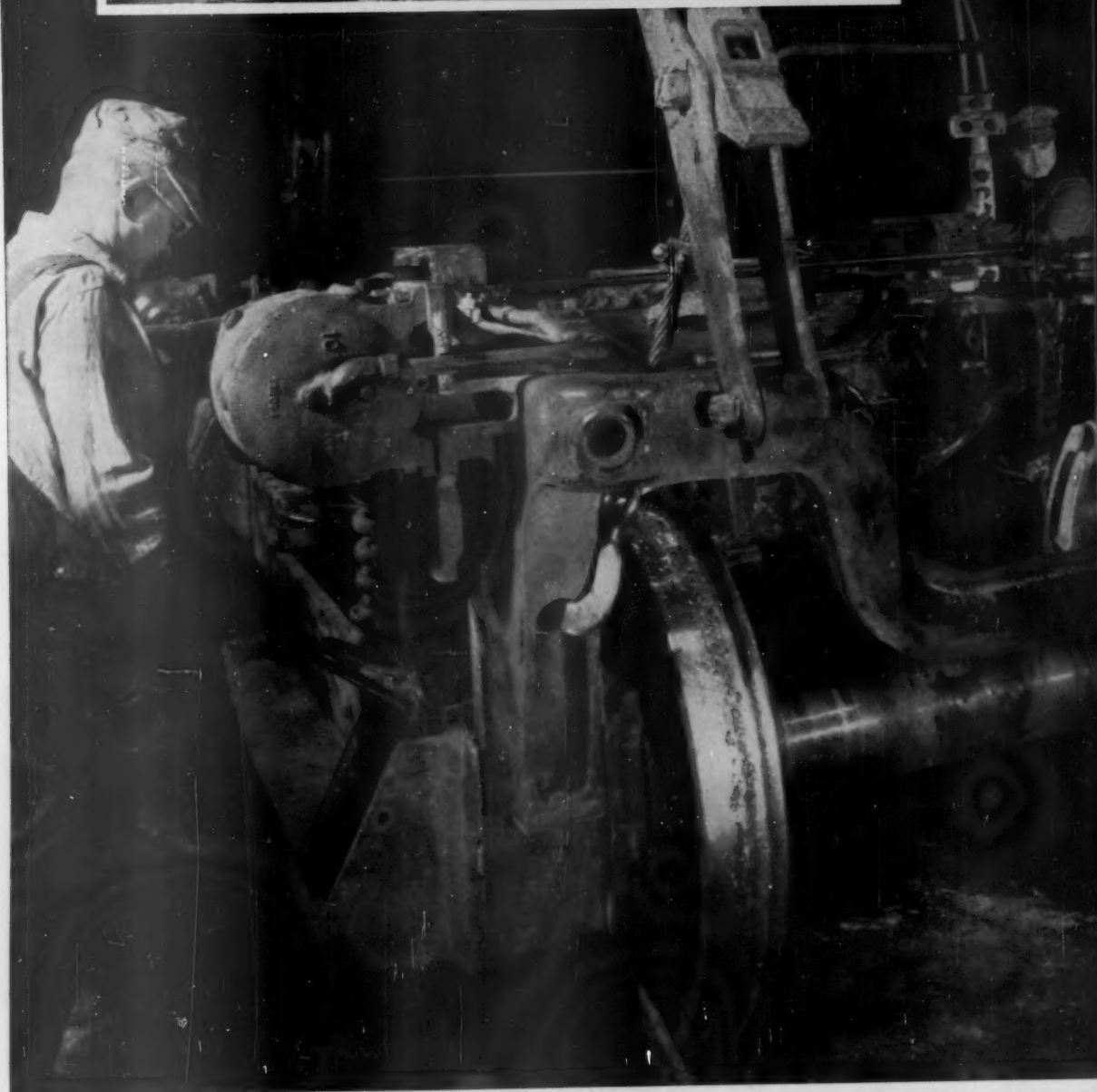
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Spokane, Portland and Seattle Railway applied ALCO modernizations to its 34 road freight units over an 18-month period. They reported "This modernization program has resulted in more efficient utilization of these 34 road units. This program has updated the diesel engine from a 1946 model to the 1956 model by taking advantage of engineering developments over the past ten years."



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for long-range economy

That four-wheel diesel engine truck is being equipped with 40-inch diameter USS Multiple-Wear Wrought Steel Wheels—the wheel that gives the greatest amount of safe, dependable service under the most rigorous road conditions.

Multiple-Wear Wheels are becoming increasingly popular for freight service, too. And for good reason. More expensive, initially, than one-wear type wheels, they are actually more economical in the long run since they deliver more ton-miles than any other type wheel.

Here's how they do it. Basically, because they are made of steel, they possess the strength and toughness to bear heavy loads, the hardness to resist wear, and the ductility to minimize sudden brittle fractures. Secondly, this excellent combination of inherent properties is improved by forging, rolling, control-cooling and heat treating. The result is a wheel of unequalled soundness, well prepared for thousands of miles under heavy loads, severe braking and high speed impacts.

Remember USS Multiple Wear Wrought Steel Wheels—your best buy for all services—under diesel locomotives, electric and steam locomotives, passenger, express, and freight cars.

Two strategically located, complete wheel plants are ready to fill your orders for Wrought Steel Wheels: The McKees Rocks (Pittsburgh), Pennsylvania plant, serving the East and Southeast; and the Gary, Indiana plant, supplying the Western and Southwestern Lines.

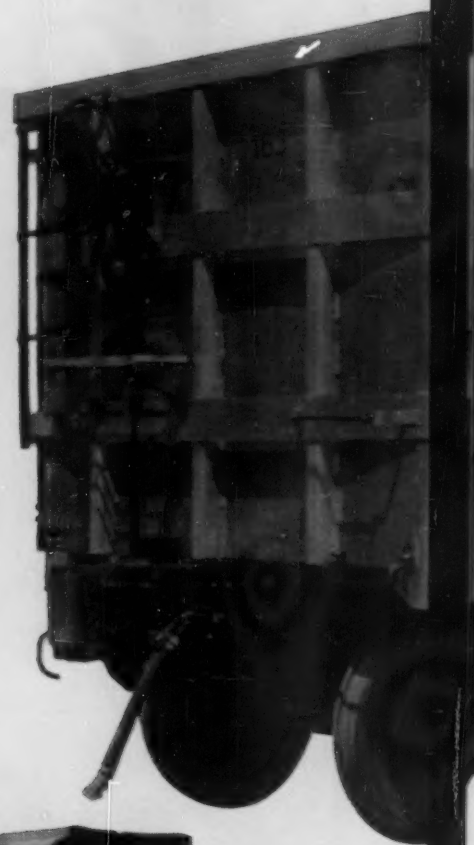
SEE The United States Steel Hour. Televised alternate weeks. Consult your local newspaper for time and station.

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USS WROUGHT STEEL WHEELS

UNITED STATES STEEL





Dimensions and Capacities

Length, coupled, ft.-in.	40-9
Length, inside, ft.-in.	36-5
Width, inside, ft.-in.	9-6½
Height, inside, ft.-in.	6-6
Capacity, level, cu. ft.	2,233
Capacity, heaped, cu. ft.	2,630
Capacity, lb.	173,300
Weight, empty, lb.	36,700



These strong, lightweight gondola cars made of Kaiser Aluminum's new high strength welding alloy 5086 were built by Magor Car Corporation, Clifton, New Jersey.

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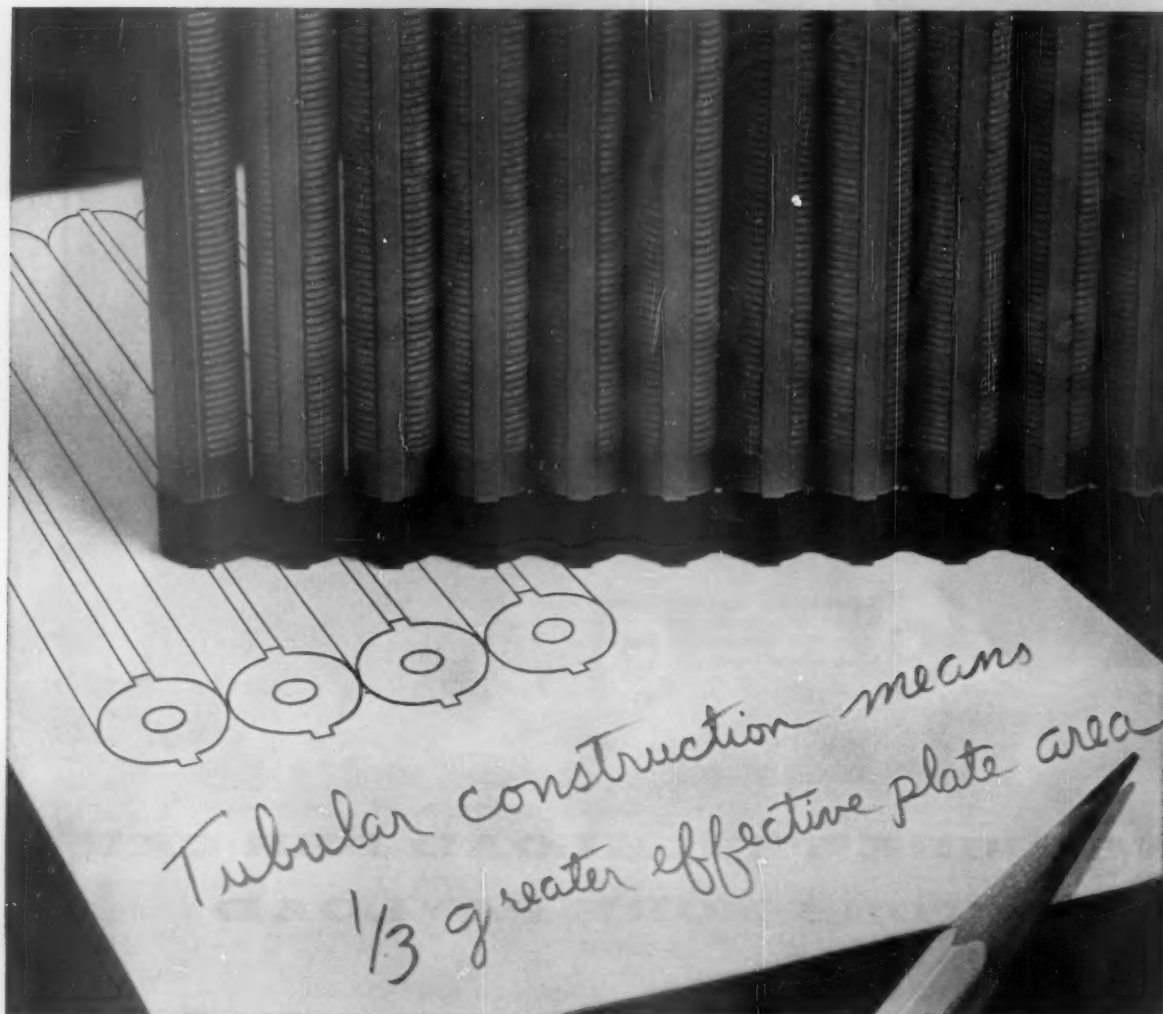
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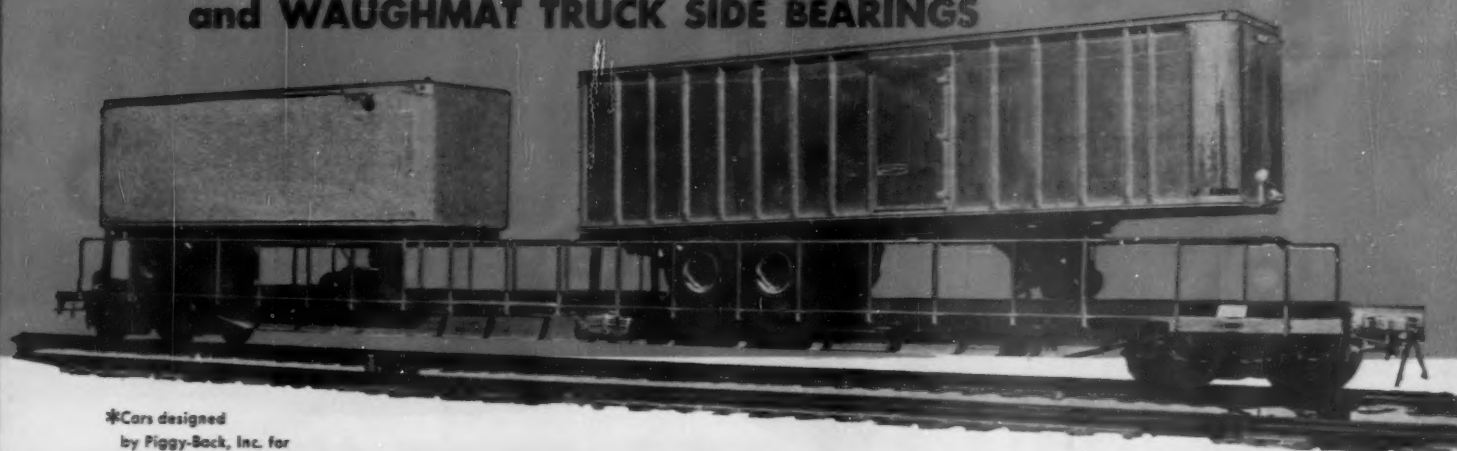
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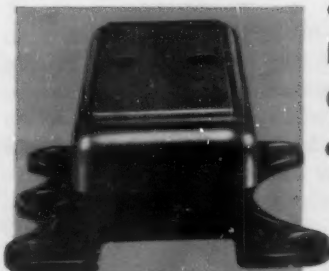
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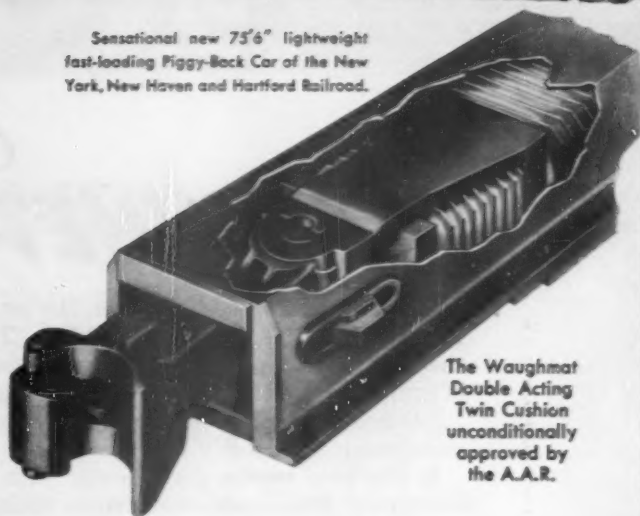
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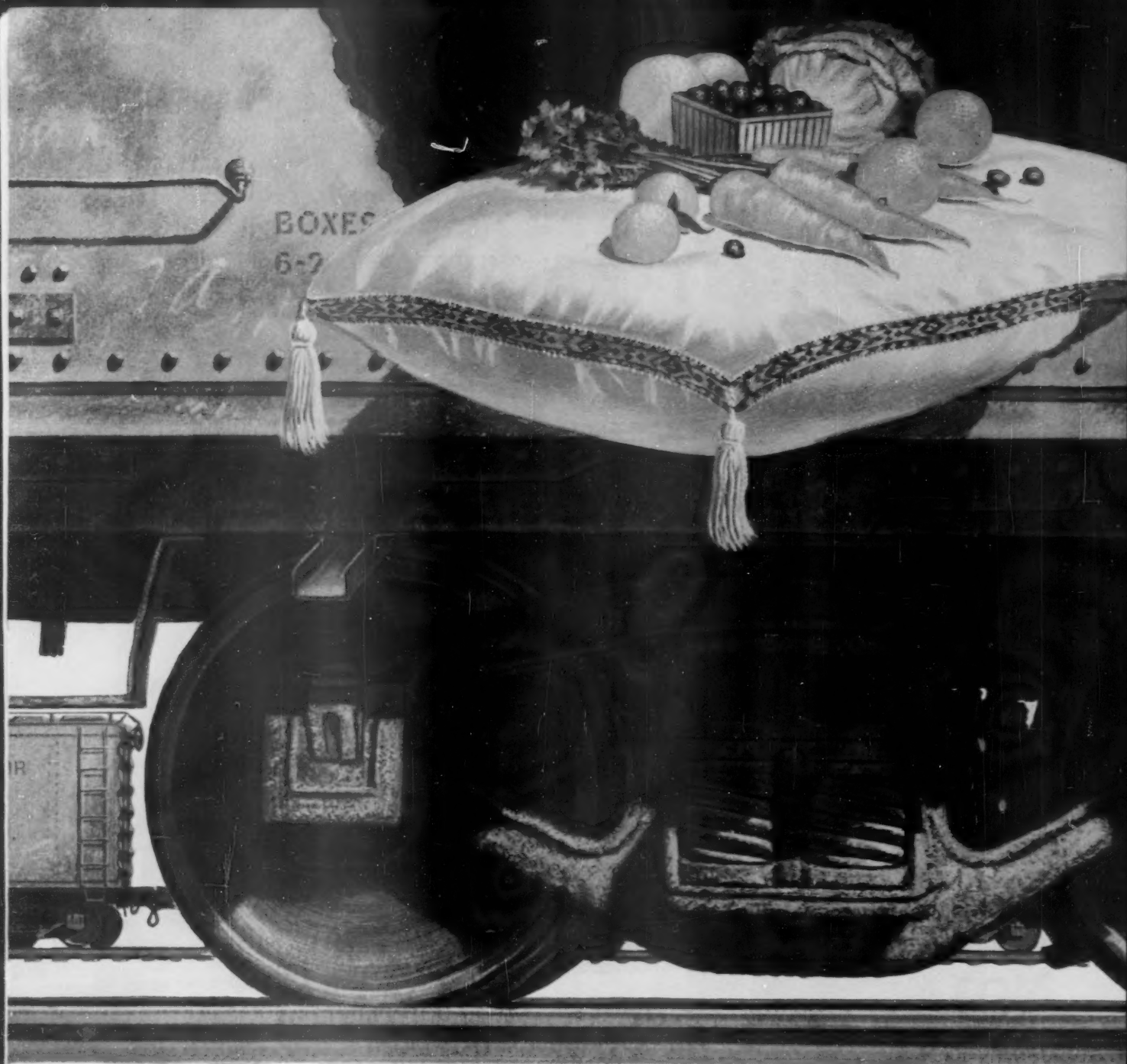
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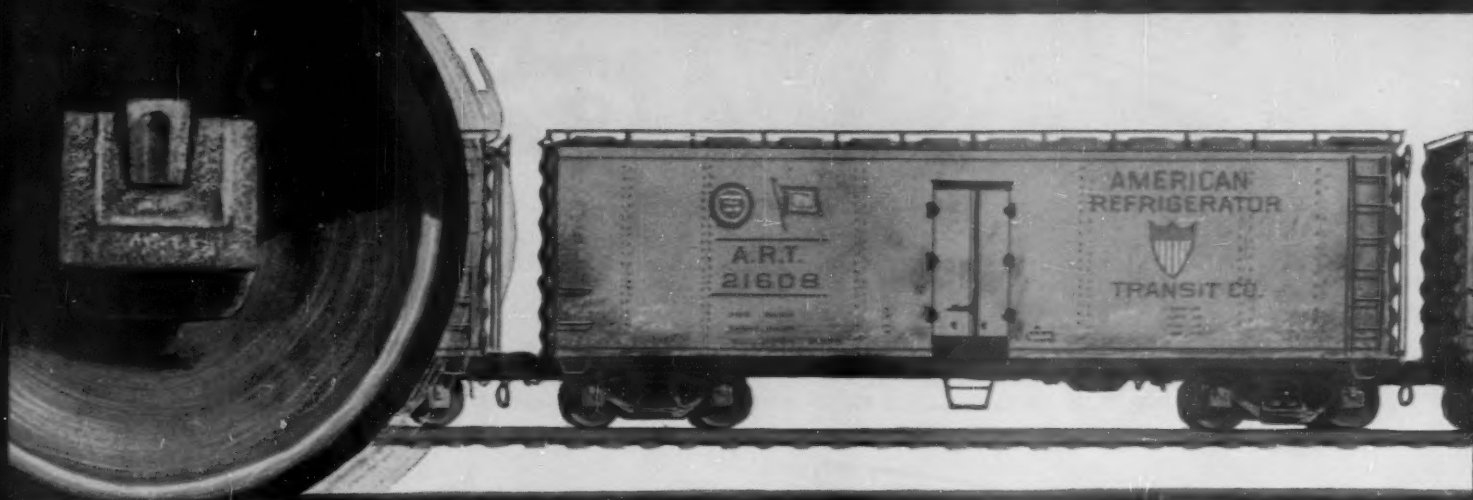
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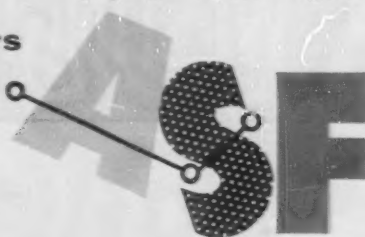
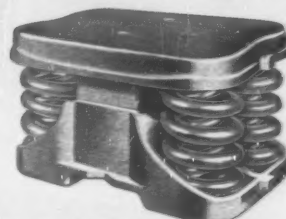
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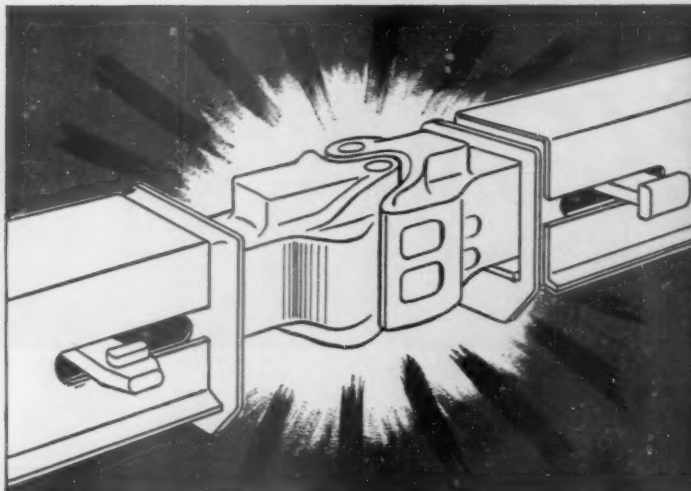
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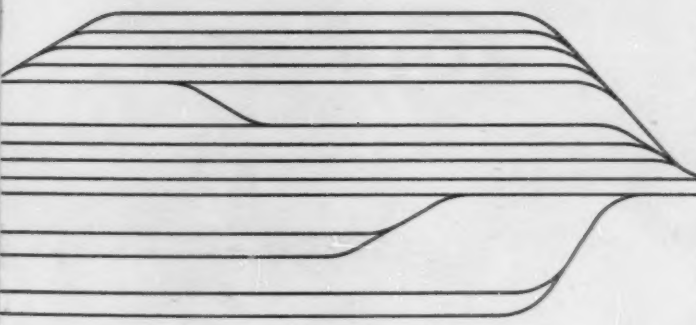


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A FOUR-PAGE PROGRESS REPORT




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1. The painters never touch this yard tower! It's covered with maintenance-free Alcoa Industrial Building Products which cost far less than masonry. The roof is natural aluminum. It reflects heat, keeps the building cooler in summer, warmer in winter. Sidewalls have the new sea-green architectural Alodine® finish which adds years of beauty to your track side structures. Alodine, a product of American Chemical Paint Company, makes the color part of the metal surface. For all of your buildings, investigate low-

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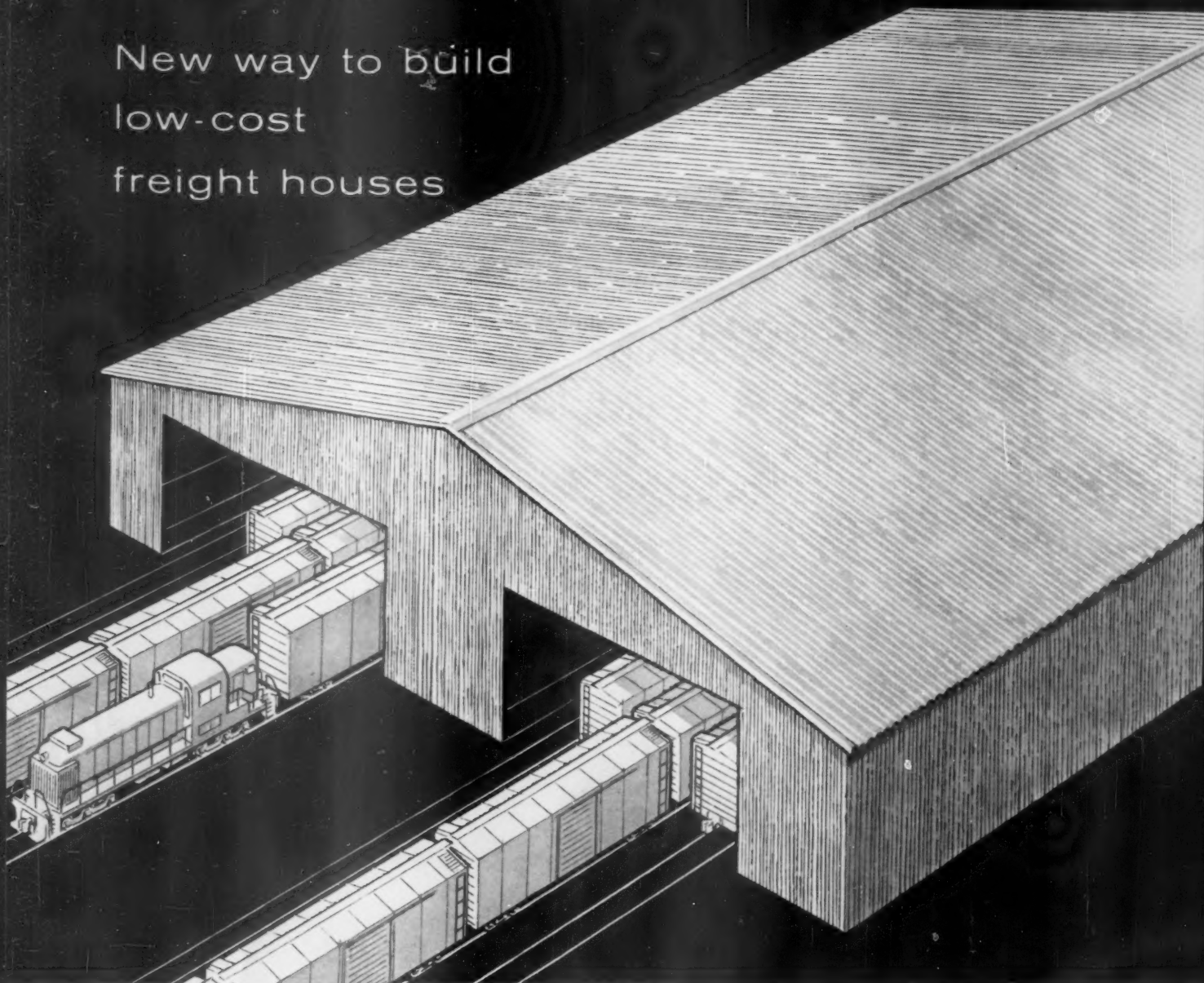
Factual informative material is available on each of these Alcoa developments. Write: Aluminum Company of America, 2180-M Alcoa Building, Pittsburgh 19, Pa.

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Your Guide to the Best in Aluminum Value.



New way to build low-cost freight houses



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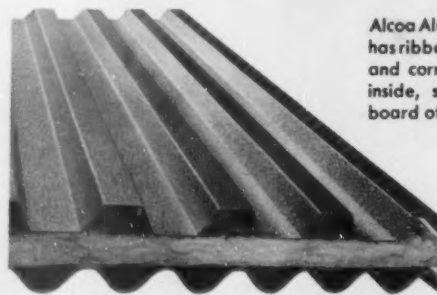
This sandwich wall has three times the insulating value of 8" masonry but it costs much less—from \$1.15 to \$1.35 per square foot installed. Sandwich wall is light in weight, so it permits lighter foundation and framework—saving you still more money.

Roof construction is Alcoa 18-foot V-beam Sheet. Insulation is suspended from structural members by means of T-bars. The unusual length and great strength of Alcoa V-beam Sheet permit longer unsupported spans to cut structural framing costs. At the same time, erection is speeded.

Alcoa makes a wide range of Industrial Building Products for railroad buildings—corrugated roofing and siding. V-beam roofing and siding, ribbed siding sheet and others. These

products come in natural aluminum finish or in the beautiful new Alodine sea-green finish which is part of the metal's surface.

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Alcoa Aluminum Sandwich Wall has ribbed siding on the outside and corrugated siding on the inside, sandwiching a 1-inch board of glass fiber insulation.



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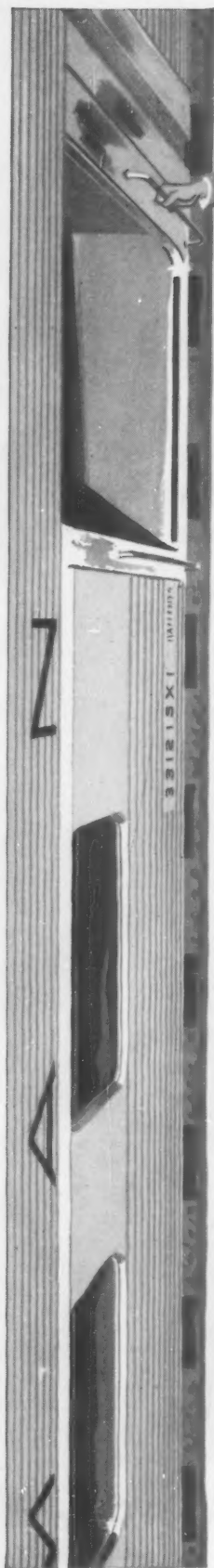
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Competitive Pressure Is Working for 'Piggyback'

Economic forces—as inexorable as gravity—are operating to compel the development of the kind of combined truck and rail service, so far best exemplified by what is known as “piggyback.”

Transportation today is a fiercely competitive business. As a result, any operator who is laggard in adopting available methods to reduce his costs, and/or improve his service, may soon find himself either short of customers or short of net earnings, or both.

Railroad service is far less costly for the line-haul between terminals than over-the-road trucking is. Trucks, on the other hand, save time and incur lower costs in terminals than railroads do—and frequently spare the shipper some incidental shipping costs which he would pay if his freight moved all-rail.

Railroads' Cost Advantage

If a highway trailer moves by rail for the line-haul part of its trip, line-haul fuel and wage expenses are reduced to the vanishing point. Some offsetting expense is incurred, however, in loading and unloading the trailers to and from railroad cars. You take the line-haul cost of moving a trailer from A to B by highway, and subtract from that amount the cost of the same movement by rail. If the result of this subtraction yields a figure that is larger than the cost of getting the trailer on and off a flat car, then the piggyback operation is economically advantageous. Cost figures indicate that this economy will usually be found, especially on longer hauls.

The railroads (and/or the regulatory authorities) can, of course, delay the development of piggybacking by going slow in reflecting in railroad rates the superior economy of line-haul by rail for piggyback service. When the railroads instituted this service, they were undoubtedly wise from a strategic standpoint in setting their rates at the truck-haul level. By now, they should have developed cost data which would justify them in cutting under all-highway rates.

Should the railroads also, (as a few of them are doing) make special trailer-mile rates, available only to common-carrier truckers?

One railroad chief executive observed not long ago: “If we are going to haul trailers for 25 cents a mile, regardless of contents—then why shouldn't we haul box cars for 50 cents a mile, also regardless of contents?”

The answer to that question is—well, maybe they ought to do that, too. Probably 50 cents a car-mile isn't enough, but a higher figure might be. There certainly

should be some difference in the rate (1) to compensate for the higher loss and damage risks of some commodities; (2) to pay extra costs of special equipment or special services; (3) and to defray the added handling costs of a heavily loaded car.

It is a fact, nevertheless, that the basic unit of railroad cost is usually the car-mile (and, to some degree, the train-mile); and that the basic unit of the cost of trucking is the truck-mile—largely regardless of the value of the lading. Rates which are based on “value-miles”—that is rates which vary widely with the value of the product carried, regardless of cost equality to the carrier—are on their way out. It is quite obvious, however, that neither the railroads, nor the common-carrier truckers, nor the regulators, nor the shipping community are yet prepared to advocate or accept railroad or truck rates, built on comparative costs and nothing else.

But the common carriers, whether truck or rail—and the regulators who certainly do not want to put the common carriers out of business—had better take a hard and continuing look at the private carriers. If a private carrier is going to buy a truck to carry high-priced machinery instead of inexpensive castings, he doesn't pay a premium price for the truck he buys. He doesn't pay a fuel or a wage premium either. And since he does not have to pay premiums for “value” in private transportation, he is more and more often refusing to pay such premiums to common carriers.

To meet such competition the common carriers will have to do their best to keep down their costs, and their charges to customers—which means that railroads will have to relinquish to the trucks the jobs the trucks can do more economically; and underprice line-haul by trucks, wherever rail movement has a cost advantage.

Hauling Truckers' Trailers

There is nothing wrong, as far as economics is concerned, in the railroads' hauling of trailers at a profitable charge per mile—whether for highway common carriers, or for other shippers. It is a question of business strategy, rather than of economics. The railroads cannot long afford to handle only occasional and “peak” traffic for truckers, at bargain charges. In other words, the railroads cannot afford to provide a mere stand-by service for truckers, any more than they can afford to do so for other shippers.

And, if any considerable amount of railroad traffic is going to be handled largely on a basis of costs, then the railroads cannot afford to provide a lot of below-cost services—as they continue to be compelled to do.

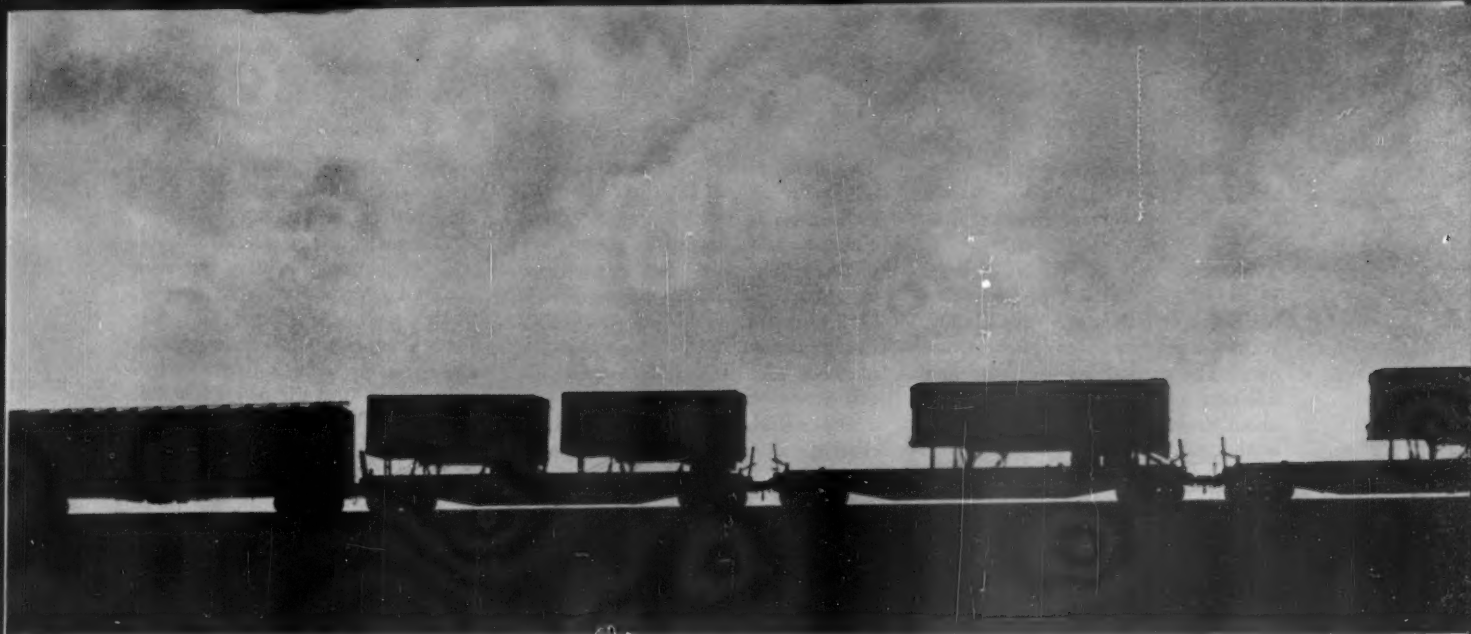
Piggybacking—and other comparable methods of coordinating rail and truck transportation—is the best device yet contrived to enable common carriers to meet the challenge of private transportation. To put forth the effort necessary to perfect the technology and the rate structure for this service is to cooperate with economic forces. It is usually more profitable to cooperate with such forces than to try to resist them.

The 'Piggyback' Picture—Today

Volume is up. Roads providing service hit new high. Big transcontinental link-up appears in the offing. That's the TOFC story at year-end.



- **EXPANSION** has run throughout 1956. Including bridge and terminal lines, 47 roads now operate piggybacks. Major hold-out area is the Southeast with only three entries. Two other roads there are making studies.
- **QUIET "HASSLE"** continues over all-rail vs. motor common carrier piggyback. Eight roads are clearly in the common carrier camp. Others talk like they'll come in.
- **CONTAINERS** add a third dimension. Some roads see great merit in eliminating trailer wheels to save weight, improve clearances; others argue that ordinary trailers are more flexible. So far two roads and one private car line have container-type piggyback service.
- **GROWTH ESTIMATES** vary. Many officers in charge of TOFC service look ahead to the day of solid trainloads. A couple of roads have that already. Predictions on piggyback revenue run as high as \$1 billion a year inside ten years.
- **INTERCHANGE** keeps growing, despite problems. Increased trailer volume on many roads in 1956 can be traced to expanded interline operations. That trend continues. Latest step: Transcontinental rate proposals are in the discussion stage.
- **DEPENDABILITY** of piggyback service is a top sales point. All-weather rail service and predictable arrival times please shippers. Rail salesmen also plug such plus services as damage-free handling, better tracing arrangements.
- **WHO'S THE CHAMP?** Early figures indicate Southern Pacific will stay ahead with close to 72,000 trailers this year. But three-fourths of these move 470 miles. The Pennsylvania's estimated 54,000 trailers get, as a rule, nearly twice as long a haul.



'PIGGYBACKS' in the consist are a common sight these days as . . .

TOFC Points Toward Profits

Piggybacking in 1956 has had its ups and downs—yet the year is ending with every indication that the future of this still-youthful rail service is bright indeed.

Today, a few months after many roads were caught in a rate squeeze,

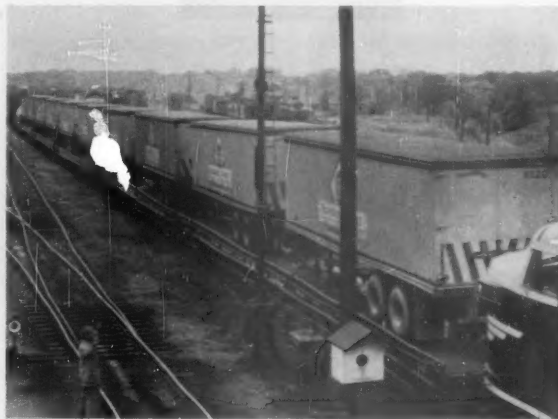
piggyback traffic is at a record peak. Thousands of trailers are moving on flat cars every month. When final figures for the year are tallied, total trailer volume will be well toward 200,000.

Predictions on the future of piggy-

backing are available on every hand. A trailer manufacturer claims the service will eventually replace nearly every box car in the country; a motor truck-railroad middleman foresees the day when motor carrier business alone will provide a \$1 bil-



C&O "RAILVAN," combination rail-highway unit, will be built in volume next year. Road plans to produce about 150 of the 26-ft units, beginning late in 1957.



NEW MOVE by Erie will put that road into motor common carrier piggyback early in January. Using French design flat cars, service will connect Chicago and New England.

lion gain in annual freight revenue; a rail officer in charge of his road's piggyback service simply says prospects are "unlimited."

In a relatively short span of three years since its revival, piggybacking has captured nearly everyone's fancy. It has been expanded many times over. The service has generated new thinking about railroad competition, about rates, about service and about equipment.

Expansion is still a by-word. Right now, for example, Official Territory roads and Western Trunk Line carriers are ironing out final details in an overall tariff on interchange. This month the first moves are being taken toward establishing rates covering coast-to-coast service.

While these things are going on more Class I roads are known to be taking another look at piggybacking. The Erie, an all-rail operation up to now, is opening its service to motor common carriers in January. The Illinois Central has followed two or three other roads in publishing a special TOFC rate for trailers of a meat packing firm. One western road is setting up a similar flat-charge arrangement covering a grocery firm's private trailers.

In spite of rapid growth like this, however, piggybacking is not without its difficulties. The service has caused strong cross-currents of opinion on many points. Not the least of these is one that has been around from the start—shall piggyback service be all-rail, or for motor common carriers, or both? Moreover, what about firms that operate fleets of their own trucks and trailers?

And, more recently, what about containers?

No conclusive answers to these questions are yet forthcoming. Apparently they must be resolved by experience and up to this point it's hard to say who will come out ahead. For the moment, the great majority of roads are sticking with their all-rail operations.

Other unsettled problems keep recurring as piggybacking expands. Per diem on the trailers is one. Connecting roads have so many different arrangements that one officer likened them to "Heinz 57 Varieties." The usual range is from \$3.25 to \$5.00 on a trailer, plus the standard \$2.40 on the car. Rented trailers usually carry a higher rate than those that are owned. What few refrigerator trailers there are in a class to themselves. Some roads, like the Alphabet route to the East, have a common "pool" of trailers and no per diem is charged as long as trailers remain on the owning lines.

Interchange arrangements follow no set pattern either. In some cases trailers are landed, driven across town, and reloaded. This situation currently has some big terminal lines worried. Other times the loaded flat car is handed over under load. What connecting lines figure to be faster and cheaper governs. Tariffs covering interline business often allow for a \$35 deduction at each end to cover terminal costs. Dividing up what's left follows standard divisions practice.

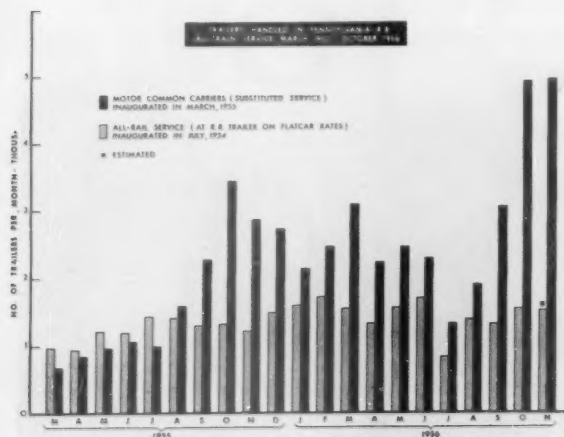
Failure to standardize piggyback equipment, especially tie-downs, is still a bother. This matter has been

under study for months but little progress is made because of the constant pattern of change.

This year, for example, AFC Industries has come up with a fast-working trailer hitch that could alter the whole tie-down picture. Trailer-Train Company, a private car-leasing agency set up a few months back, is acquiring 400 of the new hitch units for 200 of its 75-ft piggyback cars. This same firm is testing the stubby 38-ft "Adapto" flat car, also developed by ACF, and a similar-type car designed by Pullman-Standard. The AAR has approved 500 of the Adapto cars for limited interchange while their serviceability is studied. Meanwhile, five railroads have ordered the so-called "Clejan car," a long car that cuts terminal time sharply.

Car utilization in piggyback service runs far ahead of conventional equipment. One Midwestern road has been able to do three round trips a week over a run that is 450 miles one way. Eugene Ryan, whose Rail-Trailer Company middlemans the PRR's common carrier truck operation, reports that PRR flat cars in New York-Chicago TrucTrain service are making better than 300 miles a day.

A few roads are humping TOFC loads, but they sometimes have trouble with trailer doors—not when the cars roll into the yard so much as when later cuts come in on top of them. Loads shift against the doors. This raises the question of bracing the load inside the trailer. Roads have found their TOFC shock problem is longitudinal, not lateral the



PENNSYLVANIA PICTURE shows how motor common carrier business has outstripped the road's own TrucTrain service.



RAIL-BILLED FREIGHT rolls off Wabash flat cars at St. Louis, ready for delivery. Trailerload volume reached an all-time high in October.

way it most often is on the highway.

Clearances have bothered some roads, too, and some have reduced tire sizes on the trailers to gain added inches. A tunnel problem has been largely the cause of one road's staying out of piggybacking altogether up to now.

These, then, are some of piggyback's problems. But in spite of such hindrances piggybacking moves into 1957 with a running start. Everywhere volume is up. One road reports 90% of its TOFC traffic is "new business."

Certainly no service in a long

time has lent itself so quickly to new uses, or stimulated as much interest among shippers and the public. Nearly any railroad offering the service can bring up something new, some different way it is using piggybacks to hold or win traffic. The following articles prove the point.

Now Mail Is Moving Piggyback

Piggybacking in 1956 began pushing over some old frontiers. New ideas paralleled TOFC expansion into new cities and new territories.

One new application of this versatile transport service occurred on the Great Northern and Northern Pacific. These roads joined in a pool operation to piggyback mail from Duluth, Minn., to St. Paul.

The undertaking, though modest, apparently is successful. It has kept the mail on the railroads when it looked like it might shift to the highway. It has helped the railroads balance trailer equipment, and helped the Post Office eliminate a number of separate handlings.

A set of peculiar conditions paved the way for this first mail piggyback operation.

There are two large woolen textile mills in Duluth, and these originate a sizable volume of parcel post—up to 1,500 packages a day in busy months. Most of the parcels go out C.O.D., a process which entails many hours' work for the Duluth post office

even without the added job of sacking. A solution to the problem lay in moving the parcels outside of sacks to the terminal distribution point, St. Paul, 161 miles away, where sorting and sacking jobs could be absorbed more readily.

Such a move, however, would have shut out the railroads and put the business in highway trucks. So the roads worked with local postal officials on an experiment. Why not piggyback the mail in railroad-owned trailers on the overnight run to St. Paul?

A Tailor-Made Service

The experiment worked. Early this year an agreement was reached to put the service on a regular basis. Since then the GN and NP have alternated month-by-month in handling the loaded trailers.

True, the operation is tailor-made to fit local conditions and the wholesale piggybacking of mail isn't just around the corner. But Duluth-St.

Paul conditions may crop up elsewhere. Meanwhile, this service shows how TOFC can be another tool in the railroad sales kit.

Volume in the GN-NP operation is not startling. In a recent busy month at the mills, loads out of Duluth totaled 23. That averaged little better than one a day for the 19 business days that month. In mid-winter, when the mills are working on summer business, traffic is correspondingly lighter.

The roads handle the mail in 24-ft trailers in regular trains. Both have overnight service to St. Paul and provide early-morning delivery to the post office.

Not to be overlooked in appraising this whole undertaking is the fact that both the GN and NP were already providing TOFC service between the Twin Cities and Duluth. But this has been primarily a one-way operation to Duluth. So picking up the mail for the return trip has meant, generally speaking, one less trailer coming back light.



LOADED MAIL TRAILER arrives at St. Paul post office.



SORTING AND SACKING of parcels follows arrival.



LARD FOR EXPORT moved piggyback on the Burlington. Trailers are cooled with Thermo-King units.

'Cooler' Runs Are Studied, Too

What is the most efficient and economic trailer refrigeration system for piggyback service? Several railroads, including the Baltimore & Ohio, have been seeking an answer to this question, still without positive results.

Experiments in the B&O's "Tofcee" service have been limited to dry ice so far, but tests with mechanical refrigeration are planned. The road's first reefer trailer entered service last summer, equipped with a Clifford dry ice cooling system. A second unit was received in mid-October.

Both of these trailers are standard 24-ft units, rebuilt in company shops where they were equipped with in-

sulation, dry ice bunkers and refrigeration coils. The trailers have 902-cu ft capacity and space for 1,200 lb of dry ice.

Mechanical Units Planned

The dry ice units will be followed early next year by two experimental 35-ft trailers equipped with Carrier mechanical refrigeration. These trailers will provide both refrigeration and heating.

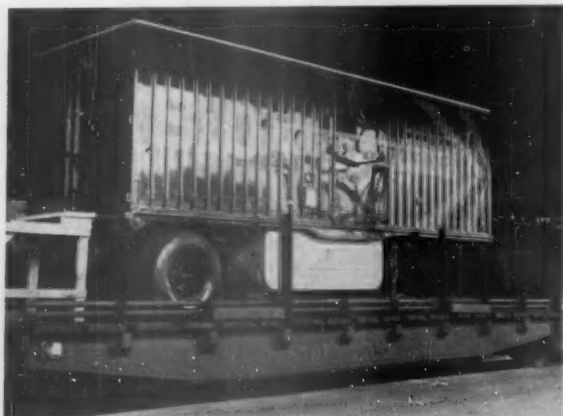
"So far our dry ice units have been successful," C. H. Groninger, B&O freight traffic manager in Chicago, pointed out recently. "We have had no refrigeration failures but we are

continuing our search to determine the most economical and efficient cooling method."

The B&O's work with the two present units has resulted in some problems. For one thing, the road recognizes the need for bigger pay loads because refrigeration cost does not increase proportionately with tonnage.

Another problem has been to schedule the reefer units to obtain loads at the proper time and to the proper destinations. Given a fleet of the units this problem undoubtedly would take care of itself.

The quantity of dry ice consumed per trip varies with the outside



'POSSUM-BELLY POD' beneath B&O trailer provides space for dry ice that cools interior.



MECHANICALLY COOLED trailer (arrow) arrives in St. Paul during test runs on the Northern Pacific.

temperature and the commodity shipped. For example, in September a load of frozen poultry moving between Chicago and the East used 1,300 lb of dry ice in one trip. A load of cheese in the same month used only 600 lb.

Fruit Growers Express services the dry ice units for the B&O under contract, as it provides refrigeration and heat for refrigerated and insulated cars on that road.

The experimental units have been operating between Chicago, Cincinnati and Washington, Baltimore, Philadelphia and New York. Loads have included cheese, butter, lard,

shortening, chocolate candy and frozen poultry. These first experimental units have no racks for handling fresh meat.

Looking Ahead

B&O considers the new units a good "competitive tool" even though they are still experimental. Much has been learned from the units; for example, precooling the trailer load was tried but found to be unnecessary in most cases. Experience has also developed the temperature or minimum refrigeration service needed for various conditions.

Present plans go beyond the two mechanical trailers currently under construction. The road's management thinks piggyback is a worthwhile business, and the service can be a money-maker. It is a new tool, enabling the road to meet truck competition both rate-wise and service-wise.

"The railroad believes it can beat the truckers' running time with piggyback service for the longer distances. We are even competitive on the shorter hauls, too, because we can provide the dependability that a shipper cannot always obtain from truckers," Mr. Groninger said.

Costs Are Getting More Notice

Railroads with piggyback service, or those about to begin, face a vexing but common problem in trying to fix costs of such operations. What's needed, at least as a starter, is some kind of cost yardstick, a measuring rod against which to gage the constant flow of rate proposals. Will this rate turn a profit? Is this business worth going after in this territory? Are terminal costs chewing up too much revenue?

The Santa Fe has taken steps toward finding answers to these and like questions. G. B. Kelley, assistant to general freight traffic manager and head of the Santa Fe's trailer-flatcar service, has devised a simple card system which he uses as a guide in appraising any rate change in his piggyback operations. Mr. Kelley points out quickly that his cards alone are not an absolutely precise measurement of costs and he can go behind them to his basic data if necessary. Meanwhile, the cards do provide guidance at a glance and throw light in what is often a rather dark area.

Line-Haul Figures First

At the beginning Mr. Kelley enlisted the general auditor in a cost study. He obtained systemwide overage figures on the line-haul costs of handling TOFC business—figures showing full costs per 100 lb, includ-

ing taxes (except income taxes) and before profits. These figures were based on minimums of 10,000, 20,000, 40,000 and 60,000 lb, but in actual practice Mr. Kelley's yardstick is based on 20,000 and 30,000 lb.

Costs Are on Cards

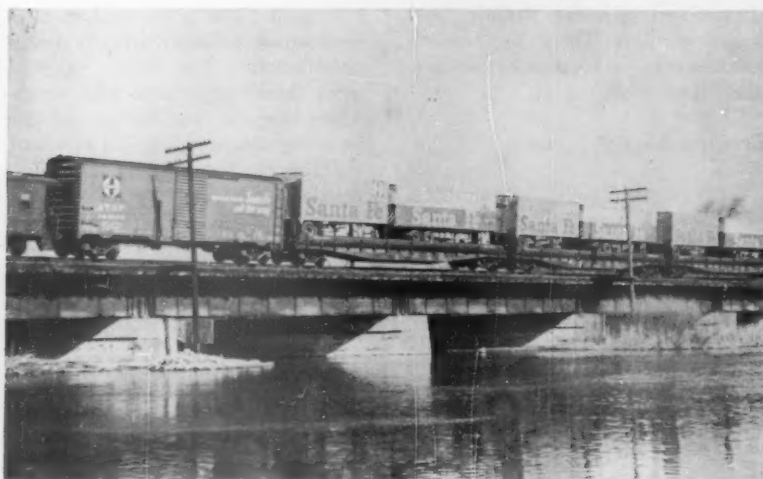
To these average figures Mr. Kelley was able to add direct costs—costs of loading and unloading at terminals, payment for substitute service where required, trailer rental charges, and the cost of pickup and delivery service.

An analysis like this was made for representative pairs of cities throughout the system, and the figures put on cards like the one illustrated. A glance at the proper card shows, for example, that it costs "X" dollars to handle a TOFC load between Chicago and McPherson, Kan. Based on 30,000 lb, a rate of, say, 90 cents is necessary to break even. For 20,000 lb the rate naturally would have to be higher, but the principle applies to any minimum.

This has given Mr. Kelley a quick way to appraise any rate proposal that comes along. If the proposal is

OTHER INFORMATION			
BETWEEN: CHICAGO		AND: McPHERSON, KANS.	
RAILHEAD: HUTCHINSON, KANS.		MILES 669	
PER TRAILER COSTS			
30,000 lbs. Min.		20,000 lbs. Min.	
Loading and Unloading.....\$:Loading and Unloading.....\$	
Substitute Service.....Miles.....Cost		:Substitute Service.....	
Trailer Rental.....		:Trailer Rental.....	
PUMD Service.....		:PUMD Service.....	
Line Haul.....		:Line Haul.....	
Total.....\$: Total.....\$	
Rate Necessary.....		: Rate Necessary.....	
BETWEEN: CHICAGO		AND: McPHERSON, KANS.	

SMALL CARDS help Santa Fe tab piggyback costs in a hurry.



TWO TRAILERS per flat car is one assumption in Santa Fe cost calculations.

clearly above his costs he can go ahead quickly. If it falls close to the

cost figure he's on notice to look carefully, perhaps even go back to

his basic data to see if refinements can be made.

75% Empty Returns

Some assumptions were of course necessary in devising this costs-on-the-cards setup. In figuring his charge for trailer rentals (they are actually owned by the Santa Fe's motor carrier affiliate), Mr. Kelley used average turnaround time plus one day. He assumed 75% empty return of trailer equipment, and all his figures contemplate the movement of two trailers per flat car.

The average line-haul costs used in developing the card system were those prevailing in 1954. They have been adjusted to keep pace with subsequent changes, and are presently figured on the basis of October 1, 1956.

A 'Fishyback' Plan Grows

The rapid growth of roll-on/roll-off "fishyback" operations in 1956 has given rise to speculation about an entirely new kind of transportation service. Will railroad piggyback service be meshed with seagoing fishyback to serve off-shore points? The possibility seems likely if a few barriers can be hurdled.

An off-shore fishyback operation is already doing a booming trailer-hauling business between Jacksonville, Fla., Puerto Rico and the Virgin Islands. Service is currently being extended to Venezuela and other Caribbean ports and, if present efforts bear fruit, into Philadelphia, New York, and across the Atlantic to Europe.

As the operation grows and becomes known more widely, it's almost certain to attract the attention of piggyback-minded railroads. That could lead to interesting changes in handling export-import merchandise traffic to the Caribbean areas and other international trading areas.

One big hitch right now is the fact that no railroad serving Jacksonville has piggyback service. That situation is apt to change, however,

if a clearance problem can be licked with the right kind of equipment.

The successful fishybacker is TMT Trailer Ferry, Inc., a 3-year-old firm headquartered in Miami. Since it went into business in August 1953 with \$500, a borrowed truck and leased deck space on a cement-carrying freighter, TMT has rung up an imposing record.

Fast Growth for TMT

Today the company is in the black. It owns or operates ten vessels, including specially outfitted trailerships, and two other trailerships, the "TMT Carib Queen" and the "Florida Queen," are being constructed. TMT recently increased its trailer equipment to more than 500 units by leasing 200 trailers from Eugene Ryan's Rail-Trailer Company at Chicago. The company holds common carrier motor rights in Puerto Rico. Early this year TMT was awarded the contract to distribute the United States mail on the island, and from Puerto Rico to the Virgin Islands. Now the firm reports it is working out details of an agreement with

Railway Express Agency to become REA's agent in Puerto Rico.

TMT's overall operation is simple and uncluttered. The approach is to trim cost and delays in cargo handling on vessels. Trailers are placed at the shipper's dock, are loaded and sealed, driven to shipside, rolled on board for the sea voyage, and finally rolled off and delivered at the door of the consignee. The firm reports its loss and damage claim ratio in this land-and-sea service is "extremely low."

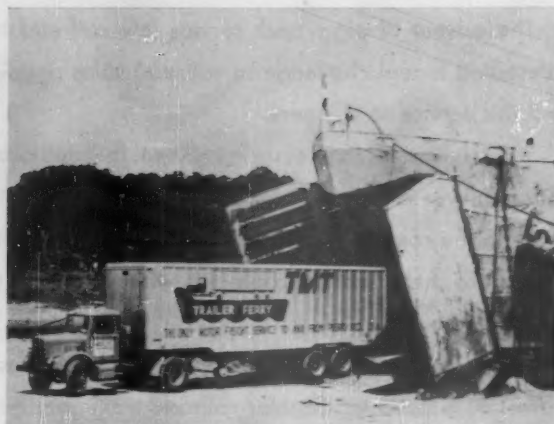
Interline operations are carried on with both motor common carriers and railroads at Jacksonville. The carrier publishes an "all inclusive" rate that covers the haul by trailership plus all risk insurance, handling charges on standard-size commodities and all wharfage charges.

More Coordination Ahead?

It is against this backstop of TMT's success and long-range planning that the piggyback-fishyback tie-up looms as plausible. The firm reports more than 50% of its export-import freight business comes from



TRAILERLOADER system developed by TMT is designed to eliminate the use of tractors in loading trailerships.



ROLLING OFF the "TMT Georgia," a loaded trailer is ready for local delivery or interchange with inland carriers.

the railroads. Lading is handled out of freight cars and into trailers at the company's Jacksonville terminal. At destination no further handling is required in providing store-door delivery.

Recently, the Department of State was requested, in behalf of TMT, to initiate steps for United States adherence to an international agreement providing for free interchange of truck trailers among 12 overseas nations—Germany, Austria, Belgium, Denmark, France, Italy, Luxembourg, Norway, Sweden, Switzerland, Czechoslovakia, and the Netherlands.

Under the international agreement, loaded trailers would be inspected and sealed at a U.S. Customs House, then moved to final destination overseas without being reopened for customs inspection at each border.

TMT President Eric Rath has already completed initial arrangements to expedite his firm's future trailer-ship operations in Western Europe.

TMT plans to establish regular trans-Atlantic service with the "TMT Florida Queen," a vessel with capacity of approximately 100 trailers and 100 automobiles and from 500 to 1,000 tons of liquid cargo.

The prospect of this expansion across the Atlantic, the acceptance that fishyback already has in the Caribbean area, plus these added factors, are all part of the groundwork which in the months ahead can set the stage for piggyback-fishyback coordination:

- Piggybacking is now well established on many railroads, and railroad officers have shown a willingness to test new applications of their trailer-hauling operations.

- Caribbean areas are having an industrial boom and their principal trade lines are with the United States. Puerto Rico alone has added over 400 new factories in the past 10 years with more in prospect.

- Shipping interests, including port authorities, operators, the De-

partment of Defense and the Maritime Administration, are backing the fishyback idea. Government-guaranteed mortgages are helping pave way for specially built ships. TMT has proposed the construction of three nuclear powered trailerships.

- Roll-on, roll-off: handling of trailers by ship saves labor costs, reduces damage and pilferage and, most of all, provides speed. Four to eight hours work can equal three days of conventional cargo handling in port. Loss of cubic space aboard ship is more than compensated by increased vessel utilization.

Mr. Rath points out that trailer shipping by sea can help equalize trade opportunities for inland shippers with those located along the coast.

- Evidence so far points toward more rapid growth of fishybacking to off-shore points than in coastwise service. The latter faces hard competition from fast and efficient inland transportation systems.

Put the trucks on **Southern Pacific**



TRAFFIC-SNAGGED motorists heartily approve SP TOFC promotion in billboards like this.

The advent of piggyback service into railroad transportation has presented a real challenge to railroad sales people. It's their job to sell this service to shippers.

This challenge applies primarily to railroad-operated piggyback (Plan 2), where the railroad has direct contact with the shipper, rather than to the common carrier trucker-operated piggyback service (Plan 1), where the railroad's contact is with the motor carrier or his representative.

Experience has shown that practices and procedures ordinarily effective in soliciting regular railroad traffic are not always the most suitable means to get more piggyback business. On the other hand, railroad-operated TOFC offers the shipper certain advantages that the railroad's salesman can capitalize on. The tremendous expansion of this operation on numerous railroads is an indication of real achievement in meeting this challenge. But our author sees opportunities for much more to be done.

New Approach Needed to Sell TOFC

Selling rail-billed piggyback service to shippers (Plan 2) has forced railroad sales people to adopt new practices and procedures. Why? First, piggyback is new; second, there are differences between piggyback and conventional rail service; and third, selling piggyback definitely means that the salesman is trying to take traffic from the railroads' highway competitors. The growth of rail-billed piggyback traffic indicates that railroad sales people have been rather successful in adapting themselves to these new circumstances.

Piggybacking under Plan 2 is today only a little more than two years old. In other words it's really new. This means usually that all features of it must be explained to the potential user. This involves getting into the details of the new tariffs. These details include rates and other features of the service such as pick-up and delivery, stop-offs, loading or unloading and areas served. Details of the equipment and loading practices or requirements also must be covered. In selling the regular rail services, the salesman generally finds

By J. L. BARNGROVE, JR.

General Traffic Manager
Delaware, Lackawanna & Western

The Lackawanna has been a strong advocate of piggybacking from the start, and was one of the first roads to begin the service in the 1954 revival. In October this year the road handled around 1,000 trailers, all rail-billed business. In this article about selling piggyback service, Mr. Barngrove expresses his underlying conviction that TOFC service is (1) a good thing for the railroads, and (2) is business for keeps.

the patron well-informed as to such details.

In selling piggyback, the effort, instead of being directed largely towards increasing the acceptance of transportation in conventional rail car service, and resisting the push of competitors, becomes directed towards making actual inroads on the traffic of competing motor carriers. The aim, which is consistent with the basic concept of competi-

tion so important in the American system of enterprise, is to take the traffic away from the competitor by demonstrating that rail piggyback service is better for the shipper.

To repeat, there are basic differences between conventional rail service and piggyback. When he makes a rail carload shipment, the shipper orders an empty car, which the railroad places as directed. By tariff, the
(Continued on page 53)

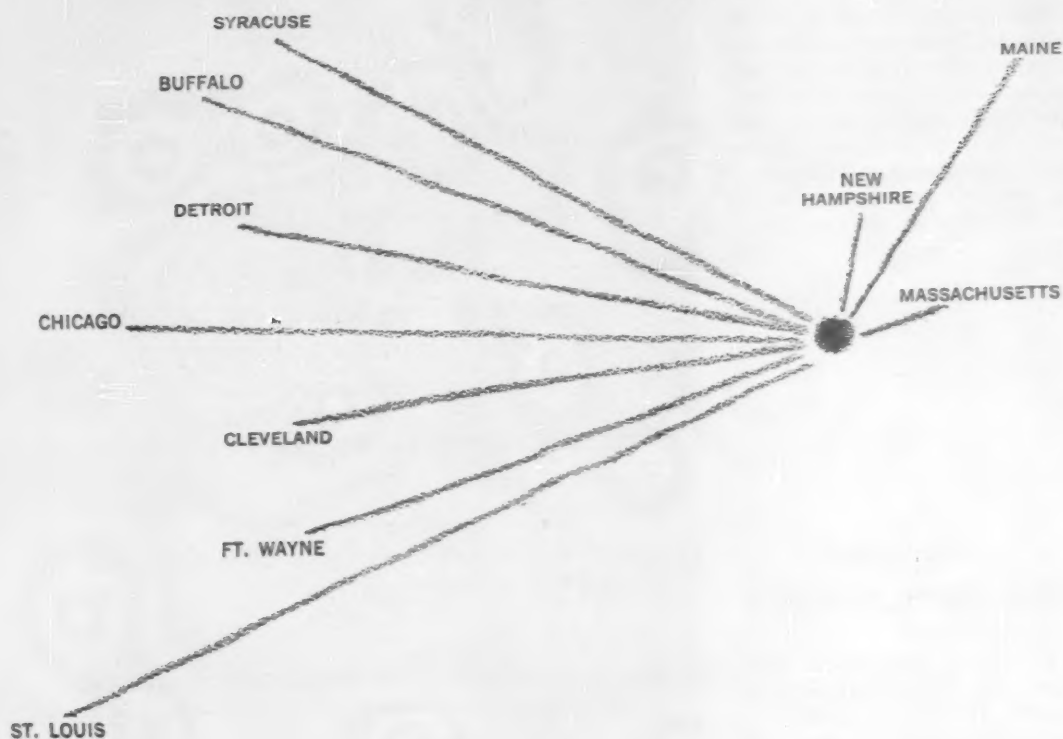
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THE MIDWEST



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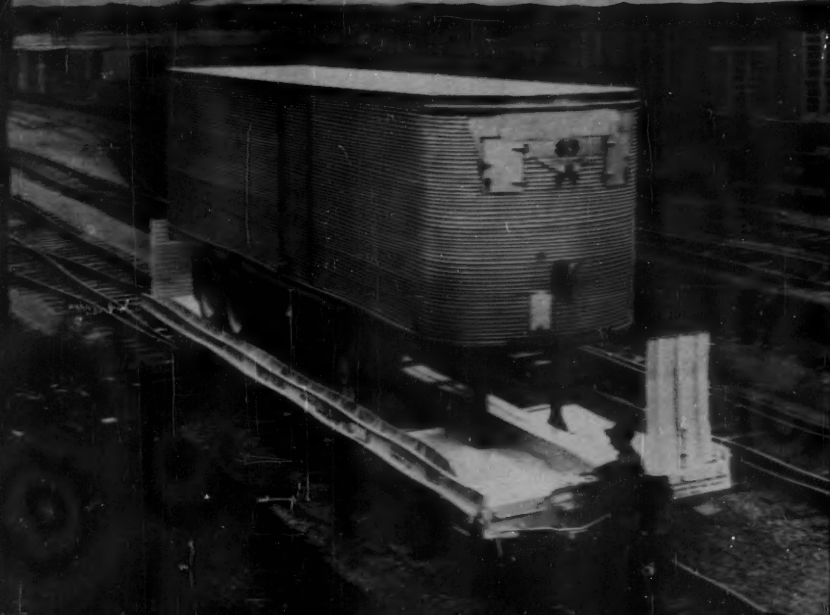
Plants: Berwick, Pa., Milton, Pa., Huntington, W. Va., St. Charles, Mo., St. Louis, Mo.





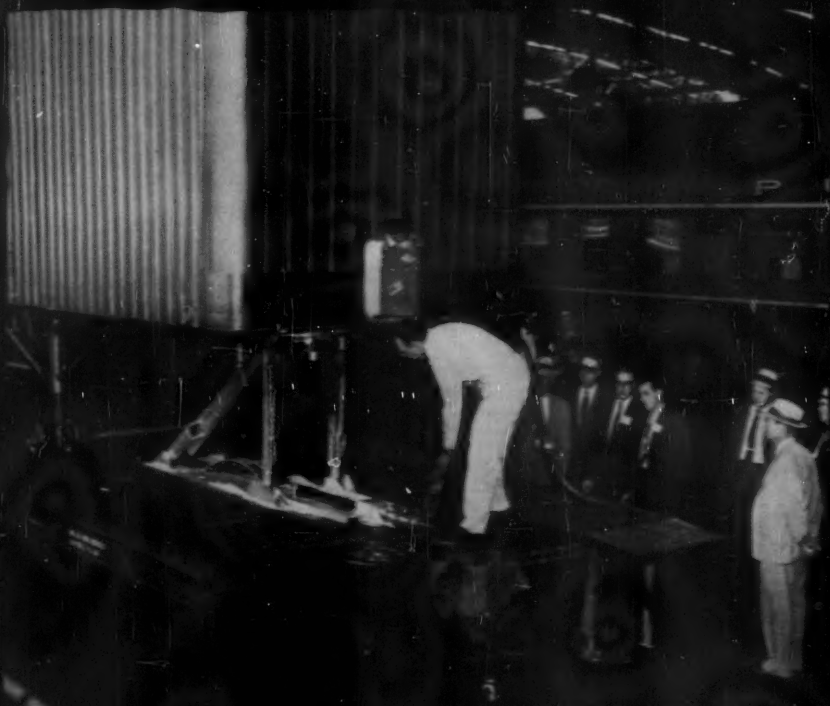
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Rigorously tested on two major railroads... provides quick transfer and tie-down of Containers or standard trailers without special crews... Containers fit standard flat-bed trucks... low deadweight reduces operating and maintenance costs... superior cushioning protects lading and trailer.



LODAPTO

Meets clearance requirements virtually everywhere: floor is 10" lower than that of standard flat car... will carry highway trailers through many low-clearance tunnels that have blocked railroad-trailer service... requires no special handling or crews... couples to standard cars in mixed consist... fast, simple transfer and tie-down... low deadweight reduces operating and maintenance costs.

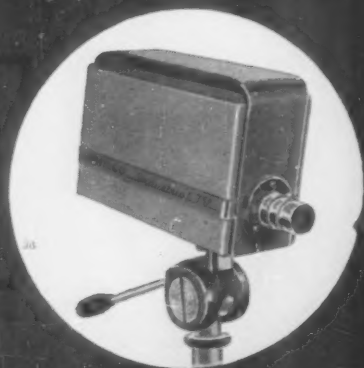


Retractable TRAILER-HITCH

Pat. Pending

Holds trailer more securely: permits free interchange of trailers on standard flat cars or *Adapto*... cuts tie-down man-hours by 85%... fastens at trailer king-pin, requires no special attachments on trailer... 40,000 foot-pounds cushioning capacity gives extra lading and trailer protection.





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a safe vantage point; efficiency can be kept at peak levels; troubles can be seen when they start... tie-ups avoided... downtime minimized. Dollar for dollar, Philco Industrial TV is the most reliable and versatile tool that you can add to your supervisory staff.

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(Continued from page 48)

shipper has the exclusive use of this car for moving his shipment until after it is unloaded at destination. He loads the car. If the load requires backing or blocking he does this. If the car happens to have some defects, such as rough floor or walls, the shipper will line the car with paper, or if the car is dirty he will clean it. At destination the consignee will unload the car, and is expected to clean it of any debris.

When making a trailerload shipment, the shipper requests the carrier to make the pick-up. The shipper then has done everything he needs to do except to issue the bill of lading. The carrier does the loading. If any bracing or blocking is required the carrier does it. If there are defects in the walls or floors of the trailer the truck driver takes care of protective work. If the trailer is dirty the driver will sweep it out. At destination the shipment is unloaded by the motor carrier. Any debris remaining in the trailer after unloading is taken care of by the truck driver. But—and this is important—the shipper does *not* have the exclusive use of the trailer. If there is room in the trailer, the carrier may complete loading the vehicle with another shipper's freight.

It is obvious that the shipper by motor carrier is accustomed to merely placing an order for a pick-up, while the carrier does the rest. To sell rail piggyback service a similar overall service must be performed. This applies to the sales approach as well as the operation itself.

Know Your Product

The most important factor in the successful selling of rail piggyback service is the same as in all other selling, namely, knowledge of the product. (It is assumed that rates and schedules are competitive with those of motor carriers.) This requires real familiarity with the tariffs, so that the salesman can answer with conviction questions raised by the prospective patron as to what the tariff provides. The prospect is accustomed to an overall service from the railroad's competitor. A favorable reaction to the sales approach cannot be expected if the prospective patron is left to his own devices to develop some of the information he may want.

Extremely important, too, is a thorough knowledge of the operation. As this is a new service the prospective patron will want to know how it "works." Generally speaking, this is the railroads' first venture into a service from shipper's door to consignee's door, without any intermediate handling of the freight, and where the railroad performs the loading and unloading.

The prospective patron will want to know the details before trying out the service. He'll want to know about trailer dimensions, type of trailer floor, weight limits and kind of trailers available. He'll want information on tracing services, advance notification, and practices in making pick-ups or deliveries.

Points for Salesmen

Also of great importance to the salesman is knowledge of the distribution and transportation practices of the prospective patrons. This includes kind of transportation used, i.e., rail, truck, water, etc., and whether shipments are in large or small lots or both.

We find it of value to tell patrons and prospects about our service through distributing circulars and brochures, as well as through advertising. This supplements the personal contact. The continuing frequent extensions of the service to additional areas have made it necessary to revise the information frequently to keep it up to date. Advertising which employs outline or diagrammatic maps has been found a practicable way to keep an up-to-date picture of our service before shippers.

The growth of piggyback traffic in the last two years is evidence of success in selling the service. From this success in selling rail piggyback service, plus the satisfaction of shippers with it, there emerge several selling points. The more important of these are:

1. Generally, rail piggyback service is more dependable—and is often faster—than truck. Adverse weather conditions such as rain, fog, sleet and snow ordinarily have little effect on rail schedules.

2. Rail piggyback rates are fully competitive with motor carrier rates. They are published in rail tariffs which are open and available to all. Rail rates are subject to the long and short haul clause of the Inter-

state Commerce Act. This is in contrast to motor carrier rates, which are not subject to the long and short haul clause. Motor carrier rates to an intermediate point often are higher than those to a more distant point. Also, the rates of many smaller truck lines are not readily available.

Publication in rail tariffs of piggyback rates, based on motor carrier charges, lifts the latter out of their position of relative obscurity. This enables shippers to determine more readily the transportation costs to various areas and eliminates much of the guesswork on the transportation costs of their competitors.

3. Railroad tracing services enable the shipper to be fully informed of the location of his shipment and expected time of arrival. Thus deliveries can be arranged conveniently.

4. Rail piggyback service practically eliminates the hazard of damage to freight. With the freight housed in a highway trailer, which in turn rides on a flat car moving over the rails, a smooth ride is achieved. There is practically no opportunity for shocks or vibration to reach the lading as occurs in fast trailer and tractor movement over an uneven highway.

5. Piggyback is a rail service that is in addition to the previously existing rail carload and rail LCL services. It appeals especially to shippers who need a fast service; those whose plant is located off track; whose consignee is off track; or those whose plant is laid out so that shipment in rail cars would require costly handling within their plants. Piggyback fills a gap in railroad service and enables the carriers to provide a more complete transportation service. The railroad is now in a position to quote rates on LCL shipments ranging in size from 100 lb up to 5,000 lb; volume LCL shipments of 5,000 lb or more; trailerload piggyback shipments which generally range in size from about 20,000 to 30,000 lb; and carload shipments mostly exceeding 30,000 lb.

The railroads' success in selling the service was far from instantaneous. Each new account had to be sold the new service. Consistent traffic growth throughout most of the past three years attests to the success of the sales effort.

This success has been a stimulant to the morale of the railroad-sales people involved.

Piggyback 'Hardware' . . .

Is Standardization Coming?

The special equipment described on these pages is convincing proof that piggyback and "containerizing" are becoming big business for both the railroads and their suppliers.

In its first piggyback roundup issue (December 13, 1954, p. 49) *Railway Age* stated that "equipment designed specifically to save space, weight and expense of tie-down in coordinated service will become essential." Some of the equipment shown on the following pages obviously was designed with this objective in mind.

Certainly piggyback still is in the adolescent stage of its development. Furthermore, the "child" seems reasonably healthy and destined to live a long and useful life. One promising direction of piggyback's growth—interline movements, exchange of containers or trailers among railroads, truck and steamship lines—indicates to some authorities that some standardization of equipment used in the service soon will be necessary.

Already some railroads and suppliers point out that standardizing not only will cut operating costs, but in the long run at least will reduce capital costs. Fruehauf Trailer Company, for example, points out that it has supplied trailers to almost all the railroads piggybacking today. Yet no two railroads have ordered the same details in the tie-down accessories on these trailers. Similarly, Fruehauf states, almost everyone trying out containers is asking for something different in size or specifications. One of the advantages of piggybacking and containerizing, from the shipper's viewpoint, is the pos-

sibility of an integrated service furnished by combination of carriers—air, highway, rail and steamship. Such integration makes necessary some standardization of the equipment to be interchanged among these carriers, Fruehauf officers believe.

Container Makes Integration Easy

A container which can be loaded and unloaded from Piggy-Back, Inc.'s floorless-I beam center sill flat car is to be on the market soon. These containers will be equipped with rollers on their undersides so they can be loaded or unloaded "circus style" or lifted from the car by fork truck. A winch operated from the power take-off of a tractor can do the work of pulling the containers off the cars and onto trailers. Trailer chassis for handling these containers will be similar in construction to the Piggy-Back flat car, i.e., they will have an I-beam center sill and no floor.

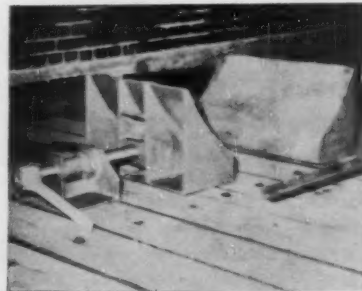
Loading containers on trailer chassis at the shipper's dock will be accomplished by tilting the chassis and having the tractor winch pull the box onto the trailer. Unloading is said to be a simple matter of tilting the trailer. During the rail movement containers will be secured to the flat cars by Piggy-Back's patented tie-downs in use already on cars designated by that company. Winches on roll-on roll-off ships will be able to pull strings of containers (or trailers) from the Piggy-Back cars onto the ships in minimum time, and inexpensively.

Piggy-Back, Inc., Dept. RA, 70 Pine st., New York 5 •



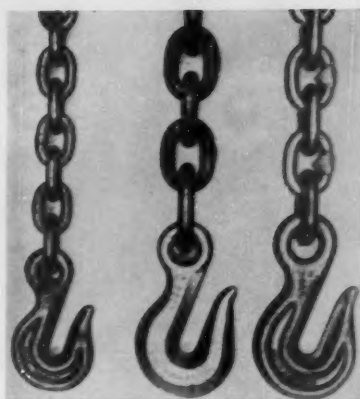
Designed especially for TOFC service is this car designed by Piggy-Back, Inc. Trailers equipped with dolly assemblies attached to axles ride the center sill "rails" of the car in loading and unloading. In upraised position are rails bridging gap between cars. Visi-

ble are clamps which fit into dolly assemblies to tie down trailers for rail movement. Lack of floor makes weight of this 79-ft 6-in car about equal to that of standard 40-ft flat. *Piggy-Back, Inc., Dept. RA, 70 Pine st., New York 5. •*



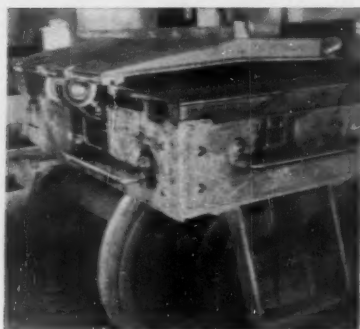
Wheel Chocks—Ratchet Type

This wheel chock has a lipped flange on the rear chock which fits into a slotted metal floor plate which is applied to the car. The front chock is pushed into position by a ratchet-operated screw with a frame flanged to fit the slotted floor plate. Ratchet operation of the screw in this new chocking method is said to be fast enough for one railroad which is adopting the device to cut the size of tie-down screws. *R. E. Russell & Co., Dept. RA, Hughesville, Pa. •*



Tie-Down Chains

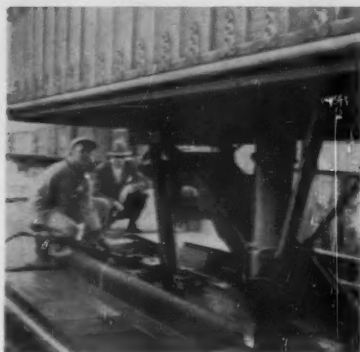
Three steps in the development of tie-down equipment for piggyback service are illustrated here. Chain similar to that shown in the center of the photo was first used. It was found then, says the manufacturer, that a lighter, more flexible chain with a similar working load limit was desirable. Thus the $\frac{3}{8}$ -in. high test coil (at left) was tried. Extra strength was gained by looping the chain through a ring or shackle on the trailer and then bringing it back to the fitting on the flat car. However, time consumed in this operation indicated that a single strand chain would be much more desirable. Hence, chain of $\frac{1}{2}$ -in. Accoloy X-Weld 125 was adopted (right). This gave the piggybacking railroad a chain of reasonable weight, high strength (more than twice the working load limit of the $\frac{3}{8}$ -in. chain) and good flexibility. Gone was the necessity for the time consuming double-looping of chain. *American Chain & Cable Co., Dept. RA, 929 Connecticut ave., Bridgeport 2, Conn. •*



Russell Sliding Bridge

This sliding bridge is readily operable by one man. Spring-loaded rollers on the car end carry the bridge to the

adjacent car. As the bridge passes its mid-point its weight depresses the rolls and the bridge settles into position on the adjacent car. In this position it rests on the cars and not on its rolls. Spring action can be through helical springs welded to the car end or a cantilever spring through the end sill. While cars are being moved the bridge lies flat on the car deck, with a positive and visual lock in open and closed position. *R. E. Russell & Co., Dept. RA, Hughesville, Pa. •*



This retractable trailer hitch is designed to combat costs of tying down trailers. The device, which can be operated by hand or with a power wrench, is said to secure a trailer in $2\frac{3}{4}$ min when power wrench operated. Hitch is to kingpin of the trailer. Built into the hitch is cushioning capacity said to be more than twice that of acceptable minimum in draft gear. *ACF Industries, American Car & Foundry Division, Dept. RA, 30 Church st., New York 7. •*



Belt rails, dividers and cross brace rods for use in trailers are being offered as aids to damage prevention. This equipment can be adapted for use in box cars also. The spring loaded rods fit into belt rails as illustrated. The expanded metal mesh dividers are attached to brace rods with three metal straps. Dividers may be carried at the ceiling when not needed. *Cargo Stabilizing Devices, Dept. RA, 2819 N. Western ave., Chicago 18. •*



This tractor is specially adapted for operations utilizing the Piggy-Back, Inc., flat car. Flanged dolly wheels on the front axle ride on the I-beam center sill of the car. Rear flanged wheels operate concentrically with the tractor's road wheels, and provide traction during loading-unloading operations. Fifth wheel of tractor is power-elevated, hydraulically, on a hinged mounting. *Mack Trucks, Inc., Dept. RA, 1355 W. Front st., Plainfield, N.J. •*

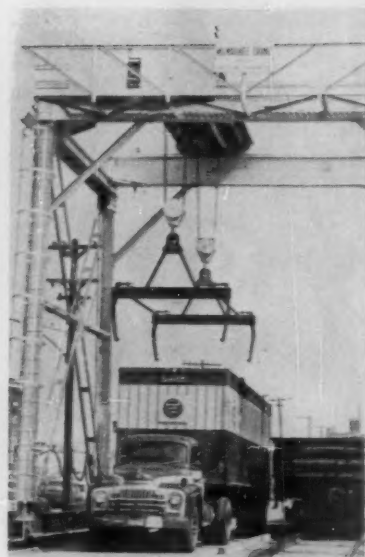


Tie-down at left in illustration has grab hook so located that double chain strength is assured when chain is looped around trailer tie-down accessories. Tie at right in picture is of fixed length and uses wire rope. Both provide for adjustments of 12 in. in the turnbuckles. Snubber action in each case is approximately $\frac{1}{2}$ in. at 20,000 lb. *R. E. Russell & Co., Dept. RA, Hughesville, Pa. •*

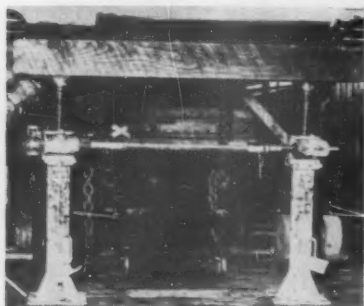


Among three models of Brandon loading-unloading ramps is the portable "Traileramp." It will handle tractor and trailer with gross combined weight of 50 tons. The ramp itself weighs 12,000 lb. Height is adjustable.

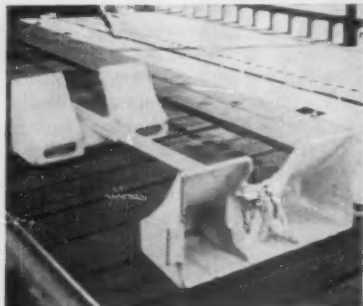
Other Brandon ramps suitable for TOFC use are the lightweight magnesium "Traileramp" and a semiportable model. *Brandon Equipment Company, Dept. RA, 332 S. Michigan ave., Chicago 4.* •



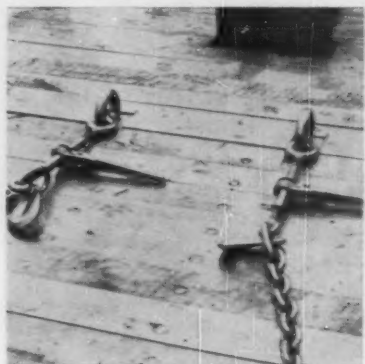
Missouri Pacific's version of piggyback involves containers transferred from trailer chassis to gondola, and vice versa, using in this case, a 25-ton capacity crane. This manufacturer makes traveling cranes to handle loads from 5 to 500 tons. *Milwaukee Crane & Service Co., Dept. RA, Cudahy, Wis.* •



In most piggyback operations jacks are used at front and rear of trailer to take weight of trailer and lading off vehicle's springs. Worm gear jacks connected by shaft permit one man to raise both jacks at same time. *Duff-Norton Manufacturing Company, 2709 Preble ave., Pittsburgh 12.* •



These wheel blocks can be used with either single or double-axle trailers. Bar connecting the two blocks goes between tires. Flange on bottom fits into slots on flat car deck or into space between planks of car deck. *Brandon Equipment Company, Dept. RA, 332 South Michigan ave., Chicago 4.* •



American Chain & Cable load binders, chain and other equipment in use on piggyback flat car.

One of the first special flat cars for use in container service is the "Adapto." Its designers say it offers 70% of the capacity of a regular flat at one half the cost. Containers of all types (refrigerator, gondola, box, etc.) can be loaded on its deck and secured for over the road movement. Loading or unloading can be done by large fork lift trucks or overhead cranes. *ACF Industries, American Car & Foundry Division, Dept. RA, 30 Church st., New York 7.* •



Photo by courtesy of Chicago Show Printing Co.



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Some customers get pretty ornery when the ticket agent can't confirm return accommodations quickly. They expect him to have an up-to-date communications setup that will bring a reply fast.

Are your communications up-to-date?

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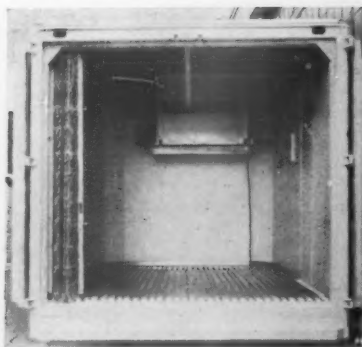
control equipment to make this service completely automatic, lightning-fast, 24 hours a day.

We'll be glad to work with you and your Communications Superintendent in planning a complete, integrated communications system to meet your needs. *Call or write Automatic Electric Sales Corporation (HAYmarket 1-4300), 1033 West Van Buren Street, Chicago 7, Illinois. In Canada: Automatic Electric Sales (Canada) Ltd., Toronto. Offices in principal cities.*

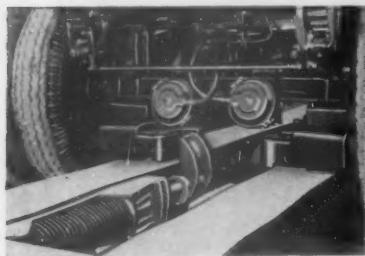
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Inside of portable refrigerated container for handling meat. System is being tried by packer Hormel in conjunction with North American Car Corporation. Loading and unloading can be done from rear or sides. Dry ice is the refrigerant. *Highway Trailer Company, Dept. RA, Edgerton, Wis.* •



Here is Fruehauf's version of a dolly assembly for rear axles of trailers to be loaded on Piggy-Back, Inc., flat car. The assembly can be removed from—and replaced on—axles in relatively few minutes, the manufacturer states, if removal should be required. Fruehauf also makes special type landing gear for trailers used on Piggy-Back cars. *Fruehauf Trailer Company, Dept. RA, Detroit 32.* •



Trailers on flat cars require lateral as well as longitudinal tie-downs. This lateral tie-down comprises a $\frac{3}{8}$ -in. high test chain with spring providing snubbing action in 3,500 lb compression up to $1\frac{1}{2}$ in. *Brandon Equipment Company, Dept. RA, Michigan ave., Chicago 4.* •



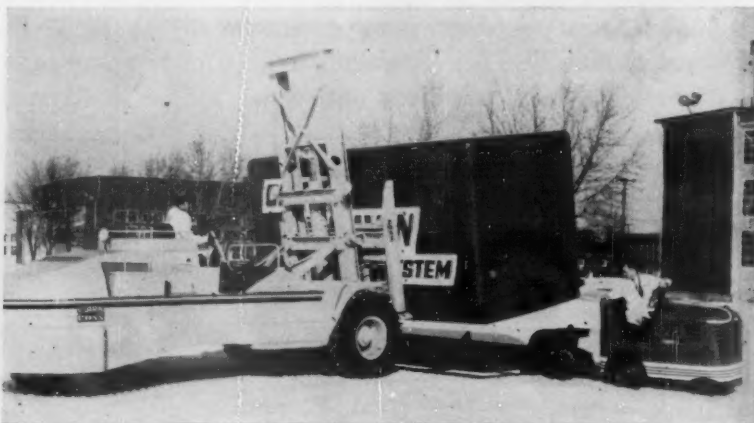
The Illinois Central is using some single-axle trailers in its TOFC operations. Manufacturer is *Highway Trailer Co., Dept. RA, Edgerton, Wis.* •



In addition to its 30,000-lb capacity lift truck, this manufacturer has a large straddle carrier for transferring Mobilvan containers from rail car to highway chassis, and vice versa. The device would be used most economically in large volume operations. *Clark Equipment Company, Dept. RA, Battle Creek, Mich.* •

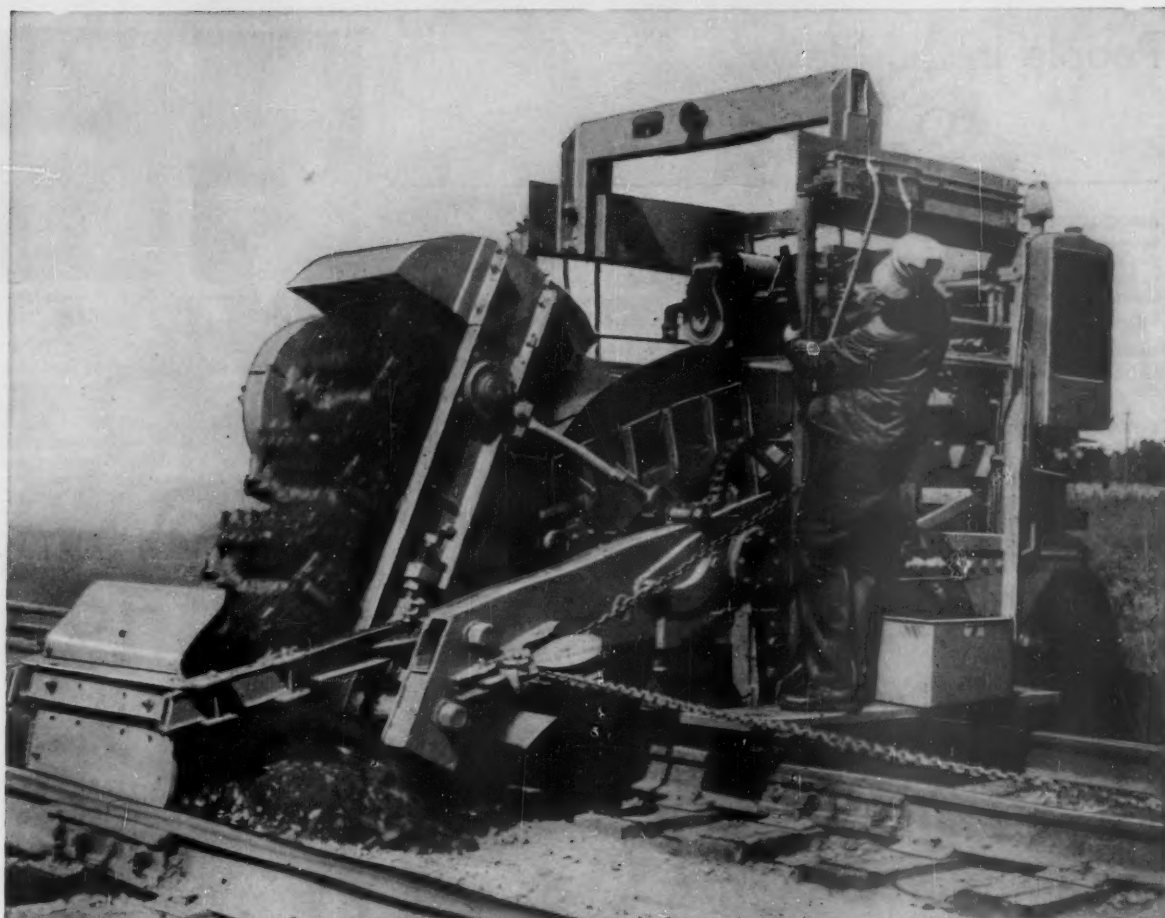


Cooperating in the development of the so-called "Mobilvan" system of containerization for rail, highway and waterway transportation were Clark Equipment Company of Battle Creek, Mich., and Fruehauf Trailer Company of Detroit. Shown here are a trailer chassis and container built by Fruehauf, and a device for locking container to chassis on freight car, designed by Clark. The lifting is done by Clark fork lift truck. The crank at left is used to move locking device into free or locking position.



Containers sometimes have to be moved from place to place within plants or from outside storage or unloading facilities to the production

line. This lightweight dolly is designed specifically for those purposes. *Clark Equipment Company, Dept. RA, Battle Creek, Mich.* •



All types of maintenance equipment, such as this ballast machine excavating inter-track ballast, can now be serviced with ONE grease...Esso Multi-Purpose Grease.

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Now ONE grease serves many purposes in rail-road track and right-of-way maintenance work. Esso Multi-Purpose Grease is gaining wide acceptance with more and more railroads, be-

cause it is ideally suited for maintenance-of-way equipment such as ballast cleaners, tampers, cribbers, screeners, and many others including automotive and construction equipment.

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- 3.** Storage and handling problems are reduced to a minimum, resulting in additional economy. It is easier to protect a single container of Esso Multi-Purpose Grease against contamination than several partially empty special-purpose drums.

Valuable years of experience in research and development, along with continual testing on the road and in the lab, stand back of the outstanding performance of famous Esso Railroad Products.



RAILROAD PRODUCTS

People in the News

CURRENT HAPPENINGS AMONG

Railway Officers

ASSOCIATION OF AMERICAN RAILROADS.—Edward G. Howard, until recently an associate in the Washington law firm of Covington & Burling, appointed a general attorney, law department, AAR, Washington, D.C.

CANADIAN PACIFIC.—W. C. E. Robinson, assistant engineer maintenance of way, Eastern region, Toronto, Ont., retired.

DENVER & RIO GRANDE WESTERN.—William G. Prescott, assistant general attorney, elected secretary to succeed Thor A. Thompson, vice-president and secretary, retired. G. L. Nicolin appointed general agent, Boise, Idaho.

ERIE.—Talbot Harding, a copy editor for the Cleveland Plain Dealer, appointed associate editor, Erie Railroad Magazine, Cleveland, succeeding Jim Alan Ross, resigned to join the public relations department of Central National Bank.

ILLINOIS CENTRAL.—J. R. Mitchell, division electrical foreman, Clinton, Ill., appointed to the newly created position of assistant electrical engineer of equipment, Chicago.

LOUISVILLE & NASHVILLE.—John M. Brewer, assistant general storekeeper, diesel materials, South Louisville, Ky., appointed general storekeeper there, to succeed R. R. Kane, retired.

Louis C. Pollard named district passenger agent in the joint L&N-Nashville, Chattanooga & St. Louis passenger office, Memphis, Tenn.

MAINE CENTRAL.—Richard M. Aylward, assistant publicity manager, Portland, Me., promoted to publicity and advertising manager. Mr. Aylward will continue his editorship of the road's monthly magazine.

MILWAUKEE.—O. L. Clawson, trainmaster, Terre Haute, Ind., appointed assistant superintendent, Terre Haute division. R. A. Middleton, assistant superintendent, Ottumwa, Ia., has exchanged positions with R. L. Hicks, assistant superintendent, Montevideo, Minn. J. D. Simon, assistant superintendent, Mason City, Ia., transferred to Marion, Ia., succeeding W. F. Bannon, appointed assistant to general manager, Lines West, Seattle. M. T. Sevedge, trainmaster, Sioux City, Ia., transferred to Savanna, Ill., to succeed R. C. Lewin, named trainmaster, Chicago Terminals, replacing G. M. Robson, resigned. George M. Dempsey, general inspector,

safety department, and Al W. Shea, district safety engineer, Chicago, appointed assistant superintendents of safety, both at Chicago. Mr. Shea's successor is M. E. Stewart, district safety engineer, Milwaukee, who in turn is replaced by F. J. Ludwig, chief clerk to superintendent Milwaukee terminals.

MINNEAPOLIS & ST. LOUIS.—Vern G. Russell, assistant freight traffic manager, Minneapolis, promoted to freight traffic manager, supervising Twin City sales. J. W. Keller, assistant to vice-president—sales, Minneapolis, named general freight agent (divisions). M. C. R. Carlson, assistant general freight agent, Minneapolis, will also be in charge of passenger operations. C. Dale Ruffcorn, general agent, named manager—traffic services. W. H. Anderson, general passenger agent, Minneapolis, retired.

NORFOLK & WESTERN.—H. D. Smallwood, assistant to auditor of revenues, Roanoke, Va., appointed auditor of passenger accounts at that point, succeeding R. F. Moore, retired. J. S. Harno, special traveling auditor, promoted to auditor of overcharge claims, Roanoke, succeeding J. H. Moseley, retired.

John S. Felton, Jr., division engineer, Norfolk, transferred to Roanoke, to succeed E. H. Roth, who retired November 30. Henry E. Dearing, draftsman, Roanoke, named crossing engineer there, succeeding Preston P. Dunavent, Jr., who replaces Mr. Felton as division engineer at Norfolk.

L. O. Reiter, assistant district manager, coal bureau, Cleveland, Ohio, appointed district manager of that bureau, succeeding George O. Ellstrom, who retired November 30. R. E. Mitchell, stenographer-clerk, coal bureau, Chicago, promoted to assistant district manager, coal bureau, Boston, succeeding W. H. Dugan, Jr., transferred to Cleveland to replace Mr. Reiter.

ONTARIO NORTHLAND.—R. J. Sayer, assistant superintendent, North Bay, Ont., appointed superintendent of transportation there, succeeding J. N. Bradford, retired.

PENNSYLVANIA.—J. F. Roberts, freight sales representative, Chicago, appointed supervisor, TrucTrain sales, Northwestern region.

ROCK ISLAND.—H. Jensen, assistant signal engineer, Chicago, appointed acting signal engineer there, succeeding H. P. Schmidt, granted leave of absence because of illness. W. B. Johnson, general signal inspector, Chicago, appointed acting assistant signal engineer to succeed Mr. Jensen, and in turn is replaced by D. L. Johnson, named acting general signal inspector.

SANTA FE.—D. A. Baumgartner, superintendent of transportation, Chicago, named general superintendent of transportation there, succeeding J. J. Mahoney, who retired November 30.

SEABOARD.—William J. Bailey, Jr., appointed assistant general passenger agent at Jacksonville, Fla., succeeding Floyd H. Bradley, transferred to Richmond, Va., to replace the late Godfrey L. Borden.

SOUTHERN PACIFIC.—E. D. Moody, on special assignment since April 1955, has re-



Richard M. Aylward
McC



D. A. Baumgartner
AT&SF

sumed his former position of assistant general manager, San Francisco, succeeding A. S. McCann. Mr. McCann has returned to his former position of superintendent, Western division, Oakland Pier, Calif., replacing J. H. Long, appointed assistant to general manager, San Francisco, to succeed I. O. Underhill.

TEXAS & PACIFIC.—Harry C. Remington, assistant to general superintendent transportation, Dallas, Tex., appointed general superintendent transportation there, succeeding the late W. T. Long, Jr.

OBITUARY

Robert Harris Parks, 89, builder and first manager of the old Merchants Despatch Transportation Company at East Rochester, N.Y., in 1896, died October 24 at his home in Pittsford, N.Y.

Supply Trade

Shippers' Car Line division of ACF Industries, Inc., has opened a sales office in the Terminal Tower, Cleveland, to service its tank car customers in that area. It is in charge of J. C. Barnes, formerly of the southeastern district sales office.

Warren A. Thomas, rebuild sales manager, Electro-Motive Division of General Motors Corporation, promoted to district sales manager, Chicago region. Austin F. Murphy, assistant rebuild sales manager, succeeds Mr. Thomas.

George I. Draffan has been elected to the newly created post of board chairman and chief executive officer of Ohio Brass Company. He has been succeeded as president and chief administrative officer by Roger A. Black, formerly vice-president.

Air-Maze Corporation has appointed William A. Powers as railroad representative, at Chicago. He was formerly with the Precision Engineering Company.

Wayne D. Dukette, manager of railroad sales for Joseph T. Ryerson & Son, Inc., from 1943 to 1945, has been appointed general manager of the company's Los Angeles plant, effective January 1. He has been manager of the San Francisco plant for some years and will continue in that capacity for the present.

Hexonics Corporation, manufacturer of flexible metal products, has acquired the Flex-O-Tube division of Meridan Corporation. The newly acquired division manufactures couplings and hydraulic hose assemblies in rubber and plastic.



William G. Prescott
D&RGW



John M. Brewer
L&N

Merry Christmas

to the **RAILROADS** in
U.S.A. • CANADA • MEXICO

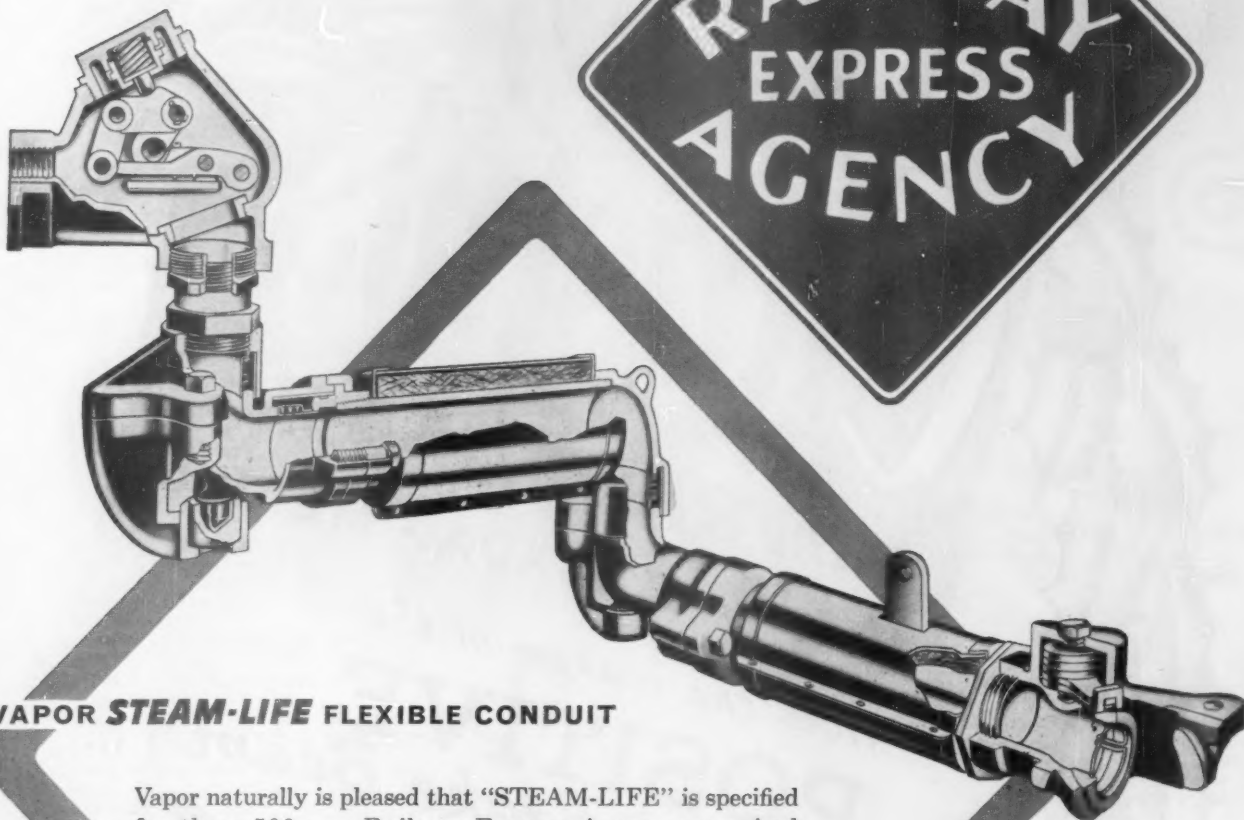
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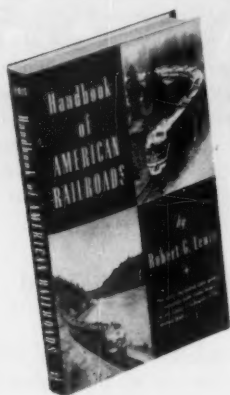
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12-17-56

(Continued from page 13)

there were 120 cab signal failures.

"The N&W has ordered and expects delivery in February 1957 of 50 diesel locomotives to replace its present steam locomotives. Unless it is permitted to discontinue its cab signals it will either have to install the present type of equipment on its new diesels at a cost of about \$342,000 and continue to contend with its present cab signal problems or replace the present system with a modern coded system at a cost of about

\$1,400,000 for wayside equipment and \$304,000 for locomotive equipment. This expense, it contends, is justified because cab signals are not required for safety of train operation in this territory.

"It is believed the discontinuance of these cab signals, and operation under a centralized traffic control system in this instance, will not materially reduce safety and will add greatly to flexibility of petitioners train operation as well as result in reduced maintenance expenditures.

Serviceable Fleet at 2-Year High

Class I railroads on November 1 had more serviceable freight cars than at any time since August 1954.

This was reported by Chairman A. H. Gass of the Car Service Division, Association of American Railroads, in his latest review of "The National Transportation Situation." Mr. Gass' figures showed that the serviceable fleet on November 1 totaled 1,634,877 cars, an increase of 1,610 above the October 1 total.

The gain was due to further reduction of the bad-order backlog, the October installations of new cars having failed to offset retirements. The latter totaled 4,877 cars while

the installations totaled only 4,346. Car-line affiliates of the Class I roads installed 304 cars in October, but they retired 625.

Detention reports for October indicated that 20.56% of the cars placed that month were detained beyond the free time. That compared with 19.15% for September and 20.26% for October 1955.

Performance data showed that freight cars produced an average of 1,036 net ton-miles per serviceable car per day in August, the latest month for which figures were available. That was above July's 873 but below August 1955's 1,048.



'Community' Christmas Tree en Route to White House

The nation's community Christmas tree is shown here as it arrived in the Pennsylvania's Conway yard, near Pittsburgh, on its way to the White House lawn. The 67-ft Engelmann spruce is the gift of the people of Alamogordo, N.M., and will be the focal point of the worldwide Christmas "Pageant of Peace." President Eisen-

hower will light the tree at 5 p.m., December 20 and broadcast a message around the world. Alamogordo, site of the first atom-bomb blast, offered the tree as a symbol to the world of the town's wish for peace. The tree was moved free by the Santa Fe and the PRR under certain ICC rules and regulations.

More Time to Consider Passenger-Cost Formula

The deadline for filing criticisms and suggestions with respect to the proposed new passenger-train cost formula has been postponed by the Interstate Commerce Commission from December 17 until January 25, 1957. The additional time was requested by the Association of American Railroads.

The formula was prepared by members of the commission's staff for use in the No. 31954 investigation of the deficit from passenger service (Railway Age, Dec. 3, p. 5). It will be the subject of an informal conference of interested parties and members of the commission staff on January 30, 1957.

Eastern Fare Case Will Get Proposed Report

The Interstate Commerce Commission has now decided that a proposed report will be issued in the eastern fare case.

The commission had previously announced that there would be no proposed report in the case in which eight railroads are proposing to raise their coach fares by 5% and six of them are proposing a 45% increase in fares for travel in parlor and sleeping cars (Railway Age, Nov. 12, p. 12). Meanwhile, the commission cancelled the oral argument which had been scheduled for December 7.

Columbia Offers Second Management Program

The second Transportation Management Program of the Columbia University School of Business will be held at Arden House, Harriman, N.Y., from January 20, 1957, to January 25, inclusive. Registration will be limited to 56 persons.

The program is designed for executives who are engaged in, or being trained for, administrative positions at managerial levels in all forms of transportation, as well as in industrial traffic departments. Participants will be selected from among the applicants on the basis of policy-making experience and interest in transportation and traffic. There are no academic requirements.

(More News on page 66)



Season's Greetings

FROM
INTERNATIONAL
STEEL COMPANY
RAILWAY DIVISION
EVANSVILLE 7, IND.



When "hot" freight has to be spotted fast call on speedy, mobile SwitchMobile

When a yard emergency arises... when high-priority freight cars have to be collected from many sidings and coupled for fast movement out... you want switching speed. Oftentimes, you don't get it, because your on-track switchers must spend so much time maneuvering through switch points. Time is lost waiting for main line clearance and at the job spotting, cutting out, and assembling cars... moving unwanted cars clear of the line.

You can save many hours per work-week with the new LeTourneau-Westinghouse SwitchMobile — the go-anywhere 208 hp locomotive-on-rubber. SwitchMobile combines off-track mobility with high traction. It can readily start a string of cars totaling 1,250 tons.

Travels direct to jobs

Prime benefit of this big, rubber-tired car-spotter for your operations is that it isn't tied to tracks, as steel-wheeled switchers are. It travels direct to jobs —over tracks, switches, embankments, ditches, roads. Wide-gauge low-pressure tires of SwitchMobile straddle rails... won't damage tracks or switches, won't chamfer ties.

Equipped with standard AAR Type E couplers and with air hose connections at both ends, 16 mph SwitchMobile can push or pull with all the ease and safety of an on-track switcher.

This mobile, rubber-tired car-handler can "leap-frog" strings of cars in a

matter of seconds... doesn't have to back-up and switch to another track to move a different car. And, because it can leave the track in a moment, it never interferes with other rolling freight in motion on the line.

Meets ICC requirements

All approved safety features have been built into this rubber-tired locomotive, in accordance with ICC regulations. A 33-cu. ft. Westinghouse compressor supplies brake pressure for all cars... automatic controls set brakes, should air supply fail in both main and reserve tanks. "Dead-man" safety switch shifts transmission to neutral if operator removes foot from pedal.

Your switcher crews will find SwitchMobile equipped with familiar railroad conveniences: a big, roomy, locomotive-type cab, standard controls (plus steering wheel) and, on the outside, non-skid steps, decking, and hand-rails. And they will appreciate SwitchMobile's "extras" — 180° visibility to front or rear, seats facing in opposite directions, with controls mounted on center column which pivots to either operator position.

Tested and now in production

SwitchMobile has proven its money-saving utility on major RR applications. Put it to work for you, to relieve congestion and eliminate time delays in your crowded, busy freight yards. Ask for complete specifications and operating data.

SwitchMobile—Trademark SM-1139-RR-z



LeTourneau-WESTINGHOUSE Company

Railroad Sales Division
Peoria, Illinois

A Subsidiary of Westinghouse Air Brake Company



Chicago Demurrage Hearing Set for Jan. 7

The Interstate Commerce Commission has moved forward one day (to January 7, 1957) the scheduled opening of the Highland Park, Ill., hearing in the case involving the railroads' proposal to increase demurrage charges.

Reduced Furlough Fares Extended to Next June 30

Reduced furlough fares for military personnel traveling in uniform at their own expense have been extended to June 30, 1957, from the previous expiration date of January 31, 1957. The extension continues the tax-exempt roundtrip fares at the rate of 2.025 cents per mile or less, good in coaches—a saving of up to one cent a mile—and includes regular stopover and baggage privileges.

Soo Line Adds Overnight Piggyback Service

Overnight piggyback service has been inaugurated by the Soo Line between Minneapolis and Chicago. Service between Neenah-Menasha-Appleton and Chicago has also been added.

Formerly, the Soo Line offered piggyback service only between Minneapolis and Appleton-Neenah-Menasha, Wis.

The railroad also has announced plans to inaugurate piggyback service soon between Chicago and Stevens Point, Wis., and between Wisconsin Rapids-Port Edwards-Nekoosa, Wis., and Chicago.

Financial

Chesapeake & Ohio.—Buys Interest in Airfreight Carrier.—The C&O has acquired a substantial interest in Slick Airways, Inc., nationwide and international airfreight carrier. C&O is taking \$3,333,000 of a total of \$5,000,000 10-year debentures to be issued by Slick next month. The debentures would be convertible by C&O into Slick common stock after January 1, 1959. Slick will use proceeds from sale of the issue to increase its capacity to handle its growing business.

"C&O's investment in Slick is in

Maine Central.—*Transfers Highway Subsidiary's Stock.*—The MeC has transferred its stock holdings in its highway subsidiary, the Maine Central Transportation Company, to the Greyhound Corporation in exchange for \$425,000. Agreement providing for sale of the subsidiary had been reached on April 8, 1954, with consummation being delayed pending ICC approval and authorization (Railway Age, April 19, 1954, p. 55).

ALLEGHENY & WESTERN.—6% guaranteed, \$3, semiannual, payable January 1 to holders of record December 20.

BOSTON & ALBANY.—\$2.25, quarterly, payable December 31 to holders of record December 10.

BOSTON & ALBANY.—\$2.25, quarterly, payable December 31 to holders of record December 10.

CANADA SOUTHERN.—\$1.50, semiannual, payable February 1 to holders of record January 18.

CANADIAN PACIFIC.—75c, regular, semi-annual, 25c, extra, both payable in Canadian funds February 28 to holders of record January 4.

CHICAGO, BURLINGTON & QUINCY.—\$2, year-end, payable December 24 to holders of record December 7.

COLORADO & SOUTHERN.—common, \$1, annual; 4% non-cumulative 2nd preferred, \$4; both payable December 28 to holders of record December 14.

KANSAS CITY SOUTHERN.—common, 75c, quarterly, 25c, extra, payable December 31 to holders of record December 10; 4% non-cumulative preferred, 50c, quarterly, payable January 15 to holders of record December 31.

LAKE SUPERIOR & ISHPEMING.—35c, quarterly, payable January 15 to holders of record January 2.

MAHONING COAL.—common, \$7.50, quarterly, payable December 31 to holders of record December 21; 5% preferred, \$1.25, semiannual, payable January 1 to holders of record December 21.

MISSOURI-KANSAS-TEXAS.—7% preferred, 50c, accumulative, payable January 2 to holders of record December 17.

NASHVILLE & DECATUR.—7½% guaranteed common, 93¾c, semiannual, payable January 2 to holders of record December 21.

NEW YORK & HARLEM.—10% preferred, \$2.50, semiannual, payable January 1 to holders of record December 15.

NORTHERN PACIFIC.—45c, quarterly, 10c, extra, payable January 25 to holders of record January 4.

NORWICH & WORCESTER.—8% preferred, \$2, quarterly, payable January 2 to holders of record December 15.

PITTSBURGH & LAKE ERIE.—\$1.50, quarterly, payable January 15 to holders of record January 4.

PITTSFIELD & NORTH ADAMS.—\$2.50, semi-annual, payable January 2 to holders of record December 10.

RICHMOND, FREDERICKSBURG & POTOMAC.—common, \$1, quarterly, \$1, extra; dividend obligation, \$1, quarterly, \$1, extra; 6% guaranteed, 75c, semiannual, \$1.25, extra; 7% guaranteed, 87½c, semiannual, 12½c, extra; all paid December 14 to holders of record December 3.

WARE RIVER.—guaranteed, \$3.50, semiannual, payable January 2 to holders of record December 10.



Up to 25% more push power

How much available engine-power you actually put to work depends on your grader's gear-train. With your gear-shift, you proportion driving force between *push* and *speed*. Working in too low a gear-ratio wastes power that could be used to move the load faster. Too high a gear-ratio leaves operator the choice of taking a very light cut . . . or of overloading, and pulling down his engine to inefficient operation at close to stalling speeds.

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In reverse gear, Adams gives you a range of 4 back-up speeds (instead of 2 in other graders) with a top of 13 mph. That means faster shuttle work

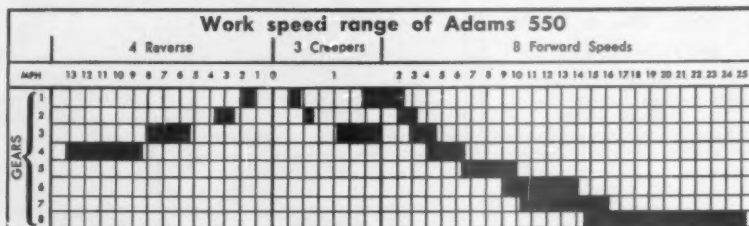
Higher-than-average travel speeds—up to 26 mph—save you additional time on job-to-job travel with Adams.

Adams has an even wider gear-range available for extremely hard or tough materials. Optional creeper gears apply *full* horsepower at speeds down to 32 ft. per min. with accompanying increase in tractive effort. With these 3 additional speeds (total 11 forward), you get extra power... save wear and stress on grader... and have far more accurate control for finish-grading.

Let us give you details on how this all adds up to more work capacity per engine horsepower. Adams graders are available in five models, rated 60 to 150 horsepower. Write us for comparative data on best size for you.

60 hp Model 220 is a top-quality, low-cost grader, with more limited range of gear-ratios than heavier-duty models as described above.

Wide speed selection lets Adams graders work any load at fastest practical speed. That means more work done in a day's time, more power for working in tough materials.



Adams—Trademark AG-18-RR-z



Railroad Sales Division
Peoria, Illinois

A Subsidiary of Westinghouse Air Brake Company



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Prefer applicant with college degree, between ages of 35 and 45. Excellent retirement plan, life insurance, and hospitalization benefits.

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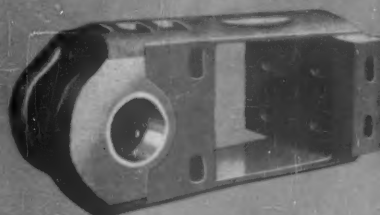
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A.A.R. Type H
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Shank Pin
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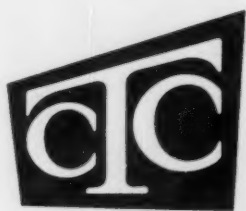
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Investment depends on the job to be done. On most lines now operating without block signals, you can install entirely adequate cTc facilities for less than automatic block signaling would cost.

If signals are already in, investment can be held to a minimum by utilizing much of the existing equipment.



Does  mean -

"TOO MUCH" APPARATUS?

cTc is a method—the best we know—of operating a railroad. The amount and the kinds of apparatus depend on the job to be done. On light-traffic lines, for example, you can use hand switches. You may even need *fewer* signals than would be required for automatic block signaling.



How much will  cost me?

Your own team of operating personnel and signal officers can give you the facts on costs. If you need us, GRS Transportation Engineers are ready to work with you, to give you a cost estimate and a conservative forecast of how quickly you may anticipate paying off your investment from savings.



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